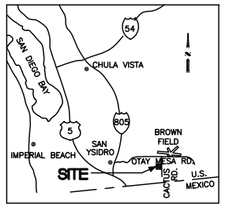
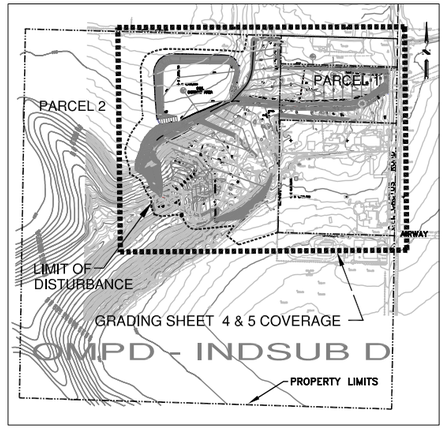
UNITED STATES DISTRICT COURT COORDINATING COMMITTEE
SESI PROPERTY CLOSURE PROJECT
CITY OF SAN DIEGO, CALIFORNIA



VICINITY MAP – NO SCALE



KEY MAP – SCALE – 1"=250'

GENERAL NOTES

1. APPROVAL OF THESE PLANS BY THE CITY ENGINEER DOES NOT AUTHORIZE WORK TO BE PERFORMED UNTIL A PERMIT HAS BEEN ISSUED.
2. THE APPROVAL OF THIS PLAN OR ISSUANCE OF A PERMIT BY THE CITY OF SAN DIEGO DOES NOT AUTHORIZE THE SUBDIVIDER AND OWNER TO VIOLATE ANY FEDERAL, STATE, OR CITY LAWS, ORDINANCES, REGULATIONS, OR POLICIES, INCLUDING, BUT NOT LIMITED TO, THE FEDERAL ENDANGERED SPECIES ACT OF 1973 AND AMENDMENTS THERETO (16 USC SECTION 1531 ET.SEQ.)
3. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY MONUMENTATION AND/OR BENCHMARKS WHICH WILL BE DISTURBED OR DESTROYED BY CONSTRUCTION. SUCH POINTS SHALL BE REFERENCED AND REPLACED WITH APPROPRIATE MONUMENTATION BY A LICENSED LAND SURVEYOR OR A REGISTERED CIVIL ENGINEER AUTHORIZED TO PRACTICE LAND SURVEYING. A CORNER RECORD OR RECORD OF SURVEY AS APPROPRIATE, SHALL BE FILED BY THE LICENSED LAND SURVEYOR OR REGISTERED CIVIL ENGINEER AS REQUIRED BY THE LAND SURVEYORS ACT.

   IF ANY VERTICAL CONTROL IS TO BE DISTURBED OR DESTROYED, THE CITY OF SAN DIEGO FIELD SURVEY SECTION MUST BE NOTIFIED, IN WRITING, AT LEAST 3 DAYS PRIOR TO THE CONSTRUCTION. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE COST OF REPLACING ANY VERTICAL CONTROL BENCHMARKS DESTROYED BY THE CONSTRUCTION.
4. IMPORTANT NOTICE: SECTION 4216/4217 OF THE GOVERNMENT CODE REQUIRES A DIG ALERT IDENTIFICATION NUMBER BE ISSUED BEFORE A "PERMIT TO EXCAVATE" WILL BE VALID. FOR YOUR DIG ALERT I.D. NUMBER CALL UNDERGROUND SERVICE ALERT TWO WORKING DAYS BEFORE YOU DIG:

   UNDERGROUND SERVICE ALERT 1–800–442–4133 BUILDING AND IRRIGATION 1–800–442–4133
   WATER AND SEWER 1–800–442–4133 CABLE TELEVISION 1–800–442–4133
   COMMUNICATION DIVISION 1–800–442–4133
5. CONTRACTOR SHALL IMPLEMENT AN EROSION CONTROL PROGRAM DURING THE PROJECT GRADING AND CONSTRUCTION ACTIVITIES. THE PROGRAM SHALL MEET THE APPLICABLE REQUIREMENTS OF THE STATE WATER RESOURCE CONTROL BOARD
6. "PUBLIC IMPROVEMENT SUBJECT TO DESUETUDE OR DAMAGE." IF REPAIR OR REPLACEMENT OF SUCH PUBLIC IMPROVEMENTS IS REQUIRED, THE OWNER SHALL OBTAIN THE REQUIRED PERMITS FOR WORK IN THE PUBLIC RIGHT–OF–WAY, SATISFACTORY TO THE PERMIT–ISSUING AUTHORITY.
7. ALL EXISTING AND/OR PROPOSED PUBLIC UTILITY SYSTEM AND SERVICE FACILITIES SHALL BE INSTALLED UNDERGROUND IN ACCORDANCE WITH SECTION 144.0240 OF THE MUNICIPAL CODE.
8. PRIOR TO ANY DISTURBANCE TO THE SITE, EXCLUDING UTILITY MARK–OUTS AND SURVEYING, THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR A PRE–CONSTRUCTION MEETING WITH THE CITY OF SAN DIEGO FIELD ENGINEERING DIVISION (858) 627–3200.
9. THE CONTRACTOR SHALL HIRE A "QUALIFIED PERSON", WHO HAS BEEN TRAINED TO CONDUCT INSPECTIONS AND PREPARE REPORTS OF THE CONSTRUCTION SITE WITH RESPECT TO THE CITY'S MUNICIPAL CODE/ORDINANCES AND THE SWPPP. THE QUALIFIED PERSON SHALL ATTEND THE PRE–CONSTRUCTION MEETING. THE QUALIFIED PERSON SHALL HAVE KNOWLEDGE AND TRAINING OF THE INTENT AND ENFORCEMENT OF SWPPP'S AND BMP'S.
10. THE CONTRACTOR SHALL MAINTAIN A COPY OF THE SWPPP AT THE CONSTRUCTION SITE AND MAKE IT AVAILABLE TO THE CITY OF SAN DIEGO AND REGIONAL WATER QUALITY CONTROL BOARD'S (RWQCB) REPRESENTATIVES UPON REQUEST.
11. THE QUALIFIED PERSON SHALL CONDUCT REGULAR INSPECTIONS OF THE PROJECT SITE IN ACCORDANCE WITH RECOMMENDATIONS OUTLINED IN THE SWPPP. EACH INSPECTION SHALL BE DOCUMENTED IN THE FORM OF WRITTEN REPORTS RETAINED ON–SITE. ALL REPORTS SHALL BE MADE AVAILABLE TO THE CITY OF SAN DIEGO AND RWQCB REPRESENTATIVES UPON REQUEST.
12. THE CONTRACTOR SHALL HAVE EMERGENCY MATERIALS AND EQUIPMENT ON HAND FOR UNFORSEEN SITUATIONS, SUCH AS DAMAGE TO UNDERGROUND WATER AND SEWER UTILITIES WHEREBY FLOWS MAY GENERATE EROSION AND SEDIMENT POLLUTION.

SPECIAL NOTES

SEE SHEET 2

GRADING AND GEOTECHNICAL SPECIFICATIONS

1. ALL GRADING SHALL BE DONE UNDER OBSERVATION AND TESTING BY A QUALIFIED CIVIL ENGINEER OR GEOTECHNICAL ENGINEER AND, IF REQUIRED, BOTH A QUALIFIED CIVIL ENGINEER OR GEOTECHNICAL ENGINEER AND AN ENGINEERING GEOLOGIST. ALL GRADING MUST BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY ORDINANCE AND THE RECOMMENDATIONS AND SPECIFICATIONS SET FORTH IN THE SOILS REPORT OR GEOLOGICAL/GEOTECHNICAL INVESTIGATION ENTITLED "GEOTECHNICAL REPORT, SESI PROPERTY CLOSURE PROJECT, OTAY MESA, SAN DIEGO, CALIFORNIA" PREPARED BY ENV AMERICA INCORPORATED, DATED JULY 1996.
2. ALL FILL MATERIAL SHALL BE COMPACTED TO A MINIMUM OF 90% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE MOST RECENT VERSION OF A.S.T.M. D–1557 OR AN APPROVED ALTERNATIVE STANDARD.
3. AT THE COMPLETION OF THE GRADING OPERATIONS FOR THE EARTHWORK SHOWN ON THIS PLAN, AN AS–GRADED SOILS REPORT, OR IF REQUIRED, AN AS–GRADED SOILS AND GEOLOGICAL REPORT WILL BE PREPARED IN ACCORDANCE WITH THE MOST RECENT EDITION OF THE CITY OF SAN DIEGO TECHNICAL GUIDLINES FOR GEOTECHNICAL REPORTS. THE FINAL "AS–GRADED" GEOTECHNICAL REPORT WILL BE SUBMITTED TO THE FIELD ENGINEERING SECTION OF PUBLIC WORKS AND A SECOND COPY TO THE GEOLOGY SECTION OF THE PLANNING AND DEVELOPMENT REVIEW DEPARTMENT WITHIN 15 DAYS OF THE COMPLETION OF GRADING. WHERE GEOLOGIC INSPECTION IS INDICATED IN THE PERMIT OR PROJECT PLANS, REPORTS OR SPECIFICATIONS, THE FINAL REPORT MUST ALSO BE REVIEWED AND SIGNED BY A CALIFORNIA CERTIFIED ENGINEERING GEOLOGIST.
4. IF THE GEOTECHNICAL CONSULTANT OF RECORD IS CHANGED FOR THE PROJECT, THE WORK SHALL BE STOPPED UNTIL THE REPLACEMENT HAS AGREED IN WRITING TO ACCEPT THE RESPONSIBILITY WITHIN THE AREA OF THEIR TECHNICAL COMPETENCE FOR APPROVAL UPON COMPLETION OF THE WORK. IT SHALL BE THE DUTY OF THE PERMITTEE TO NOTIFY THE CITY ENGINEER AND THE GEOLOGY SECTION OF THE PLANNING AND DEVELOPMENT REVIEW DEPARTMENT IN WRITING OF SUCH CHANGE PRIOR TO THE RECOMMENCEMENT OF GRADING.
5. THESE GRADING PLANS HAVE BEEN REVIEWED BY THE UNDERSIGNED AND FOUND TO BE IN CONFORMANCE WITH THE RECOMMENDATIONS AND SPECIFICATION OUTLINED IN THE REFERENCED SOILS REPORT OR GEOLOGICAL/GEOTECHNICAL INVESTIGATION PREPARED FOR THIS DEVELOPMENT.

S. SHAHRIAR SHAHIN R.C.E. 42940 Date

DANIEL J. GIFFORD C.E.G. 1959 Date

*Company Name ENV AMERICA INCORPORATED
Phone No. 949–453–9191

6. FOR SOILS FILE SEE CITY RECORD S.___S–420058_____

CONSTRUCTION CHANGE TABLE

CHANGE	DATE	SHEET NUMBER REVISED OR ADDED THIS CHANGE

ESTIMATED GRADING QUANTITIES

EXCAVATION	34,100 CY
FILL	40,900 CY
NET (IMPORT)	(6,800) CY

NOTE: FOR PERMITTING PURPOSES ONLY. BID SHALL BE BASED ON CONTRACTORS OWN ESTIMATED QUANTITIES.

EROSION CONTROL NOTES

SEE SHEET 13

REFERENCE DRAWINGS

30444–D 31273–D

SITE ADDRESS

1902 CACTUS ROAD, SAN DIEGO, CALIFORNIA

TOPOGRAPHY SOURCE

TOPOGRAPHY FROM AERIAL PHOTOGRAMMETRIC SURVEY BY ZENITH AERIAL, INC. 10/12/94

BENCHMARK

ELEVATIONS ARE BASED ON CITY OF SAN DIEGO BENCHMARK AT S.W. CORNER OF I–905 (OTAY MESA RD.) AND CACTUS RD., A BRASS PLUG TOP OF CURB ON OTAY MESA RD., ELEVATION IS 508.579 FEET MSL.

COORDINATES SHOWN ARE BASED ON THE CALIFORNIA SYSTEM ZONE 6, 1983 NORTH AMERICAN DATUM. THE BASIS OF BEARINGS INCLUDES CITY OF SAN DIEGO RECORD OF SURVEY 14492, POINT NUMBER #1408, COORDINATES N1,787,207.18 E6,336,847.17, A BRASS DISK IN A MONUMENT WELL AT THE INTERSECTION OF OTAY MESA ROAD AND BRITANNIA BLVD. , AND POINT NUMBER #1471, COORDINATES N1,784,537.89 E6,334,175.77, A 0.75" IRON PIPE WITH BRASS TAG IN DIRT S.E. OF INTERSECTION AIRWAY RD. AND CACTUS RD. THE BEARING BETWEEN THE POINTS IS S45°01'21"W.

GRADING NOTES

1. GRADING AS SHOWN ON THESE PLANS SHALL BE IN CONFORMANCE WITH CURRENT STANDARD SPECIFICATIONS AND CHAPTER 14, ARTICLE 2, DIVISION 1, OF THE SAN DIEGO MUNICIPAL CODE, 2000 EDITION.
2. PLANT AND IRRIGATE ALL CUT AND FILL SLOPES AS REQUIRED BY ARTICLE 2, DIVISION 4, SECTION 142.0411 OF THE SAN DIEGO LAND DEVELOPMENT CODE AND ACCORDING TO SECTION IV OR THE LAND DEVELOPMENT MANUAL LANDSCAPE STANDARDS, UNLESS OTHERWISE SHOWN ON THESE PLANS.
3. GRADED, DISTURBED, OR ERODED AREAS THAT WILL NOT BE PERMANENTLY PAVED, COVERED BY STRUCTURE, OR PLANTED FOR A PERIOD OVER 90 CALENDAR DAYS SHALL BE TEMPORARILY REVEGETATED WITH A NON–IRRIGATED HYDROSEED MIX, GROUND COVER, OR EQUIVALENT MATERIAL.

DECLARATION OF RESPONSIBLE CHARGE

I HEREBY DECLARE THAT I AM THE ENGINEER OF WORK FOR THIS PROJECT, THAT I HAVE EXERCISED RESPONSIBLE CHARGE OVER THE DESIGN OF THE PROJECT AS DEFINED IN SECTION 6703 OF THE BUSINESS AND PROFESSIONS CODE, AND THAT THE DESIGN IS CONSISTENT WITH CURRENT STANDARDS.

I UNDERSTAND THAT THE CHECK OF PROJECT DRAWINGS AND SPECIFICATIONS BY THE CITY OF SAN DIEGO IS CONFINED TO A REVIEW ONLY AND DOES NOT RELIEVE ME, AS ENGINEER OF WORK, OF MY RESPONSIBILITIES FOR PROJECT DESIGN.

SHAHRIAR SHAHIN R.C.E. 42940 DATE
MY REGISTRATION EXPIRES 3/2004

ENV AMERICA
ENVIRONMENTAL ENGINEERING, CONSULTING & CONSTRUCTION
16 TECHNOLOGY DRIVE
SUITE 154
IRVINE, CALIFORNIA 92618
PHONE 949–453–9191
FAX 949–453–9292

OWNER / APPLICANT

SALIM D. SESI ET. AL. (MULTIPLE OWNERS)
C/O SESI GROUP, 1950 TOWNSEND PLACE, EL CAJON, CA 92019

LEGAL DESCRIPTION

PARCEL 1: THE SE 1/4 OF THE NW 1/4 OF SEC 33/T18S/R1W OF SAN BERNARDINO BASE AND MERIDIAN EXCEPTING THE EAST 414 FT OF THE NORTH 800 FT.

PARCEL 2: THE S'LY 200 FT OF THE N'LY 300 FT OF THE EAST 414 FT OF THE SE 1/4 OF THE NW 1/4 OF SEC 33/T18S/R1W OF SAN BERNARDINO BASE AND MERIDIAN.

ASSESSOR'S PARCEL NO.

646–100–49, 646–100–59, 646–100–70 ACCORDING TO MAP ON FILE IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, STATE OF CALIFORNIA.

STREET DESIGN DATA TABLE

STREET NAME	CLASSIFICATION	DESIGN SPEED	FUTURE ADT	R.O.W. WIDTH
CACTUS RD	4 LANE COLLECTOR	45 MPH	12,000	92'

SHEET INDEX

PERMIT DESIGN, NOT FOR CONSTRUCTION

WORK TO BE DONE

THE IMPROVEMENTS CONSIST OF THE FOLLOWING WORK TO BE DONE ACCORDING TO THESE PLANS AND THE SPECIFICATIONS AND STANDARD DRAWINGS OF THE CITY OF SAN DIEGO.

STANDARD SPECIFICATIONS

1. STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (2000 EDITION), INCLUDING THE REGIONAL AND CITY OF SAN DIEGO SUPPLEMENT AMENDMENTS DOCUMENT No. 769845, FILED JULY 21, 2000.
2. 1999 STANDARD SPECIAL PROVISIONS FOR SIGNALS, LIGHTING AND ELECTRICAL SYSTEMS OF CITY OF SAN DIEGO. DOCUMENT No. 769842, FILED OCT 22, 1999.
3. "CALIFORNIA DEPARTMENT OF TRANSPORTATION, MANUAL OF TRAFFIC CONTROLS FOR CONSTRUCTION AND MAINTENANCE WORK ZONES", (1999 EDITION), DOCUMENT NO. 769843, FILED JAN 24,2000.

STANDARD DRAWINGS

1. CITY OF SAN DIEGO STANDARD DRAWINGS, INCLUDING ALL REGIONAL STANDARD DRAWINGS, DOCUMENT No.769846, FILED JULY 21, 2000.

LEGEND

ITEM	STD. DWG.	SYMBOL
PROPERTY BOUNDARY		
MAJOR EXISTING CONTOUR (5 feet interval)		490
MINOR EXISTING CONTOUR (1 foot interval)		
SPOT ELEVATION (EXISTING GROUND)		× 495.22
EXISTING POWER POLE		PP
EXISTING MONITORING WELL		WS4 MW8 LS2
EXISTING LYSIMETER		
BRUSH LINE		
PRIVATE FENCE	M–5 M–6 M–20	
DEPRESSION		
LIMIT OF WASTE WITHIN PROPERTY BOUNDARY		
DAYLIGHT LINE		
SLOPE AS INDICATED		3:1
SURFACE GRADIENT		3%
MAJOR PROPOSED CONTOUR (5 feet interval)		485
MINOR PROPOSED CONTOUR (1 foot interval)		481
PROPOSED DRAINAGE	B 9|5, E 9|5, F 9|5	D–75
TOP OR TOE OF SLOPE		
PRIVATE HDPE STORM DRAIN	A 12|5, B 12|5	
PRIVATE STORM DRAIN INLET APRON		D–39
PRIVATE STORM DRAIN STRAIGHT HEADWALL		D–30
PTIVATE ASPHALT CONCRETE DOWNDRAIN		D–22
PRIVATE GRAVEL–PAVED SURFACE	A 9|5	

ENGINEERING PERMIT NO._____
PRIVATE CONTRACT

GRADING AND IMPROVEMENT PLANS FOR:

SESI PROPERTY CLOSURE PROJECT

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 1 OF 14 SHEETS

W.O. NO. 420058

FOR CITY ENGINEER _____ DATE _____

DESCRIPTION	BY	APPROVED	DATE	FILMED
ISSUED FOR RAW	ENV AMERICA	MLR	FEB 2005	

1784 – 6331
NAD 83 COORD.

144–1771
LAMBERT COORDINATES

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

31928–1–D

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SPECIAL NOTES

THE FOLLOWING NOTES ARE PROVIDED TO GIVE DIRECTION TO THE CONTRACTOR REGARDING THE INTENT OF THE DESIGN AND TO THE SPECIAL CONSIDERATIONS FOR CLOSURE OF THE LANDFILL. THE CITY ENGINEER'S SIGNATURE ON THESE PLANS DOES NOT CONSTITUTE APPROVAL OF ANY OF THESE NOTES AND THE CITY WILL NOT BE HELD RESPONSIBLE FOR THEIR ENFORCEMENT.

1. CLOSURE CONSTRUCTION SHALL CONFORM WITH CALIFORNIA CODE OF REGULATIONS TITLE 27.
2. THESE CLOSURE CONSTRUCTION PLANS SHALL BE USED IN CONJUNCTION WITH THE PROJECT SPECIFICATIONS AND QUALITY ASSURANCE/QUALITY CONTROL PLAN PREPARED FOR CLOSURE CONSTRUCTION AT THE SITE.
3. THERE ARE EXISTING OVERHEAD UTILITIES LINES WITHIN THIS PROJECT.
4. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING GROUNDWATER MONITORING WELLS, UTILITIES, FENCING AND OTHER STRUCTURES AT THE SITE.
5. SANITARY FACILITIES SHALL BE MAINTAINED ON THE SITE.
6. GRADING SHALL NOT BE STARTED WITHOUT FIRST NOTIFYING THE CONSTRUCTION MANAGER. PRE-GRADING MEETING ON THE SITE IS REQUIRED BEFORE START OF GRADING WITH THE FOLLOWING PEOPLE PRESENT: OWNER, GRADING CONTRACTOR, ENGINEER, QA/QC CONSULTANT, CONSTRUCTION MANAGER. THE REQUIRED INSPECTIONS FOR GRADING WILL BE EXPLAINED AT THIS MEETING
7. THE CONTRACTOR SHOULD EXPECT TO ENCOUNTER WASTE IN AREAS OF EXCAVATION WITHIN THE SITE. PRIOR TO EXCAVATION THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT A FIELD EVALUATION CAN BE MADE. ONLY AFTER APPROVAL BY THE ENGINEER SHALL WASTE BE EXCAVATED. THE EXCAVATED WASTE SHALL BE HAULED TO ONSITE DISPOSAL AREAS AS SHOWN ON THE PLANS. EXCAVATION, HAULING, PLACEMENT AND COMPACTION OF WASTE, AND USAGE OF DAILY SOIL COVER IN BOTH EXCAVATION AND DISPOSAL AREAS SHALL CONFORM TO THE TECHNICAL SPECIFICATIONS.
8. SHOULD THE CONTRACTOR FIND THAT THE APPROXIMATE REFUSE LIMITS WITHIN THE SITE EXTEND BEYOND THE DESIGNED LANDFILL FINAL COVER LIMITS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER FOR ASSESSMENT OF ADDITIONAL REMOVALS, MODIFICATION OF COVER GRADES AND/OR RELOCATION OF FILL KEYS.
9. AREAS TO RECEIVE FILL SHALL BE PROPERLY PREPARED AND APPROVED IN WRITING BY THE ENGINEER PRIOR TO PLACING FILL.
10. PRIOR TO STOCKPILING OF EXCESS MATERIAL, STOCKPILE AREAS SHALL BE APPROVED BY THE ENGINEER.
11. THE ENGINEERING GEOLOGIST SHALL PERFORM PERIODIC INSPECTIONS OF THE BUTTRESS KEY AND SUBMIT A COMPLETE REPORT AND MAP UPON COMPLETION OF THE EXCAVATION.
12. THE ENGINEER, ENGINEERING GEOLOGIST, AND QA/QC CONSULTANT SHALL PERFORM SUFFICIENT OBSERVATION AND BE AVAILABLE DURING GRADING AND CONSTRUCTION TO VERIFY COMPLIANCE WITH THE PLANS, SPECIFICATIONS AND THE CODE WITHIN THEIR PURVIEW.
13. THE ENGINEER SHALL BE AVAILABLE DURING GRADING TO VERIFY COMPLIANCE WITH THE PLANS, SPECIFICATIONS, CODE AND ANY SPECIAL CONDITIONS OF THE PERMIT WITHIN THE PURVIEW.
14. THE CONTRACTOR IS RESPONSIBLE FOR DUST CONTROL MEASURES.
15. ALL EXISTING DRAINAGE COURSES THROUGH THIS SITE SHALL REMAIN OPEN UNTIL ALTERNATE FACILITIES TO HANDLE STORM WATER ARE APPROVED AND FUNCTIONAL; HOWEVER, IN ANY CASE, THE CONTRACTOR SHALL BE HELD LIABLE FOR ANY DAMAGE DUE TO OBSTRUCTING NATURAL DRAINAGE PATTERNS.
16. CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING NECESSARY SEDIMENT AND EROSION CONTROL MEASURES WITHIN THE LIMITS OF WORK FOR THE DURATION OF CONSTRUCTION.

CONSTRUCTION NOTES

(A) ABANDON WELLS AND LYSIMETERS PRIOR TO GRADING AS PER SPECIFICATIONS

(B) PROTECT IN-PLACE

(C) REMOVE AND DISPOSE OFFSITE

(D) SALVAGE AND RELOCATE AS DIRECTED BY THE ENGINEER

(E) GRADE BORROW AREA TO THE GENERAL LINES AND GRADES FOR SIDE SLOPES AND LEAVE BOTTOM OF EXCAVATION TO DRAIN. ADJUST FINAL SLOPE LOCATIONS AND BOTTOM OF EXCAVATION AS DIRECTED BY THE ENGINEER.

(F) CONSTRUCT FINAL COVER PER A 9|5

(G) CONSTRUCT FINAL COVER FOR FRONT SLOPE PER D 9|5

(H) CONSTRUCT ASPHALT CONCRETE SWALE PER B 9|5

(I) CONSTRUCT TOE OF SLOPE KEY AND 4' WIDE PERIMETER PERIMETER V-DITCH PER E 9|5

(J) CONSTRUCT TOE OF SLOPE KEY AND 3' WIDE V-DITCH PER F 9|5

(K) CONSTRUCT MIN. 3.5' HIGH BY 4' WIDE TRAPEZOIDAL CHANNEL "A" PER A 10|5,6

(L) CONSTRUCT 1.5' HIGH EARTH BERM PER C 9|5

(M) CONSTRUCT 4' WIDE X 3.5' DEEP TRAPEZOIDAL CONCRETE CHANNEL PER SAN DIEGO STD. DWG. D-71.

(N) CONSTRUCT 10" THICK 2.5' DEEP CUT OFF WALL AT CHANNEL ENDS AND EVERY 10' VERTICAL, PER SAN DIEGO STD. DWG. D-72

(O) CONSTRUCT GABION AND RIP-RAP STILLING BASIN PER E 10|5,6

(P) CONSTRUCT 2.5' HIGH BY 4' WIDE TRAPEZOIDAL CHANNEL "A-2" PER B 10|5

(Q) CONSTRUCT 30" DIA HDPE STORM DRAIN LINE "B" PER A 12|5

(R) CONSTRUCT STRAIGHT HEADWALL - TYPE A PER SAN DIEGO STD. DWG. D-30

(S) CONSTRUCT RIP-RAP PER DETAIL ON SHEET 12 AND PER DIMENSIONS SHOWN ON PLANS

(T) INSTALL 18" HDPE STORM DRAIN PER B 12|5

(U) CONSTRUCT EARTH CHANNEL ENTRY PER E 10|5

(V) CONSTRUCT ASPHALT CONCRETE DOWNDRAIN PER SAN DIEGO STD. DWG. D-22

(W) CONSTRUCT BROW DITCH - TYPE A PER SAN DIEGO STD. DWG. D-75

(X) CONSTRUCT DITCH - TYPE D PER SAN DIEGO STD. DWG. D-75

(Y) CONSTRUCT 16" HIGH MASONRY CONCRETE UNIT SPLASH WALL

(Z) MODIFY MONITORING WELL COMPLETIONS PER D 11|5

(AA) INSTALL 6' HIGH CHAIN-LINK FENCE WITH GATES PER SAN DIEGO STD. DWGS. M-5, M-6 AND M-20

(BB) INSTALL SETTLEMENT SURVEY MONUMENT PER G 9|5

(CC) CONSTRUCT STORMDRAIN INLET APRON PER SAN DIEGO STD. DWG. D-39

(DD) CONSTRUCT RISER PIPE SURFACE COMPLETION PER A 11|8

(EE) CONSTRUCT SUBDRAIN COLLECTION TRENCH PER B 11|8

(FF) EXTEND DRAINAGE ROCK/GEOTEXTILE BLANKET TO ELEVATION 440 IN ALL AREAS UP-CANYON OF CENTERLINE AND BELOW BASE OF FOUNDATION LAYER

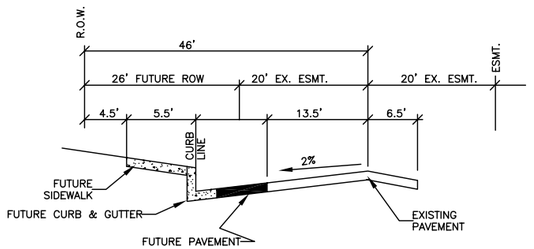
(GG) CONSTRUCT CONCRETE ANCHOR BLOCK PER C 12|12

(HH) INSTALL 48" DIA R.C.P. SAN DIEGO STD. DWGS. D-60, D-61 AND D-62

STANDARD ABBREVIATIONS

BEGIN CURVE	BC
BEGIN VERTICAL CURVE	BVC
CENTER LINE	℄
CLEARANCE	CLR.
DEPTH	D
DIAMETER	DIA.
EASEMENT	ESMT.
ELEVATION	EL. OR ELEV.
END CURVE	EC
END VERTICAL CURVE	EVC
EXISTING	EX.
FINISH GRADE	FG
FIRE HYDRANT	FH
FLOW LINE	℄
GRADE BREAK	G.B.
HIGH DENSITY POLYETHYLENE	HDPE
HIGH POINT	H.P.
INVERT	INV.
LENGTH	L
LINEAL FEET	L.F.
MAXIMUM	MAX.
MINIMUM	MIN.
NOMINAL	NOM.
POINT OF INTERSECTION	PI
POINT OF VERTICAL INTERSECTION	PVI
POLYVINYL CHLORIDE	PVC
POWER POLE	PP
SCHEDULE	SCH.
STATION	STA.
STORMWATER POLLUTION PREVENTION PLAN	SWPPP
RIGHT OF WAY	R.O.W.
TYPICAL	TYP.
VERTICAL CURVE	VC

SHEET REFERENCE B 9|5 — DETAIL; SHEETS WHERE REFERENCE IS MADE TO DETAIL; SHEETS WHERE DETAIL IS SHOWN



CACTUS ROAD TYPICAL SECTION - NO SCALE

PERMIT DESIGN, NOT FOR CONSTRUCTION

ENV AMERICA
ENVIRONMENTAL ENGINEERING, CONSULTING & CONSTRUCTION
16 TECHNOLOGY DRIVE
SUITE 154
IRVINE, CALIFORNIA 92618
PHONE 949-453-9191
FAX 949-453-9292

REGISTERED PROFESSIONAL ENGINEER SHAHRIAR SHAHIN No. 54580 Exp. 3/2004 CIVIL STATE OF CALIFORNIA

PRIVATE CONTRACT

SPECIAL AND CONSTRUCTION NOTES

SESI PROPERTY CLOSURE PROJECT

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 2 OF 14 SHEETS

W.O. NO. 420058

FOR CITY ENGINEER _____ DATE _____

DESCRIPTION	BY	APPROVED	DATE	FILMED
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1784 - 6331 NAD 83 COORD.

144-1771 LAMBERT COORDINATES

CONTRACTOR _____ DATE STARTED _____
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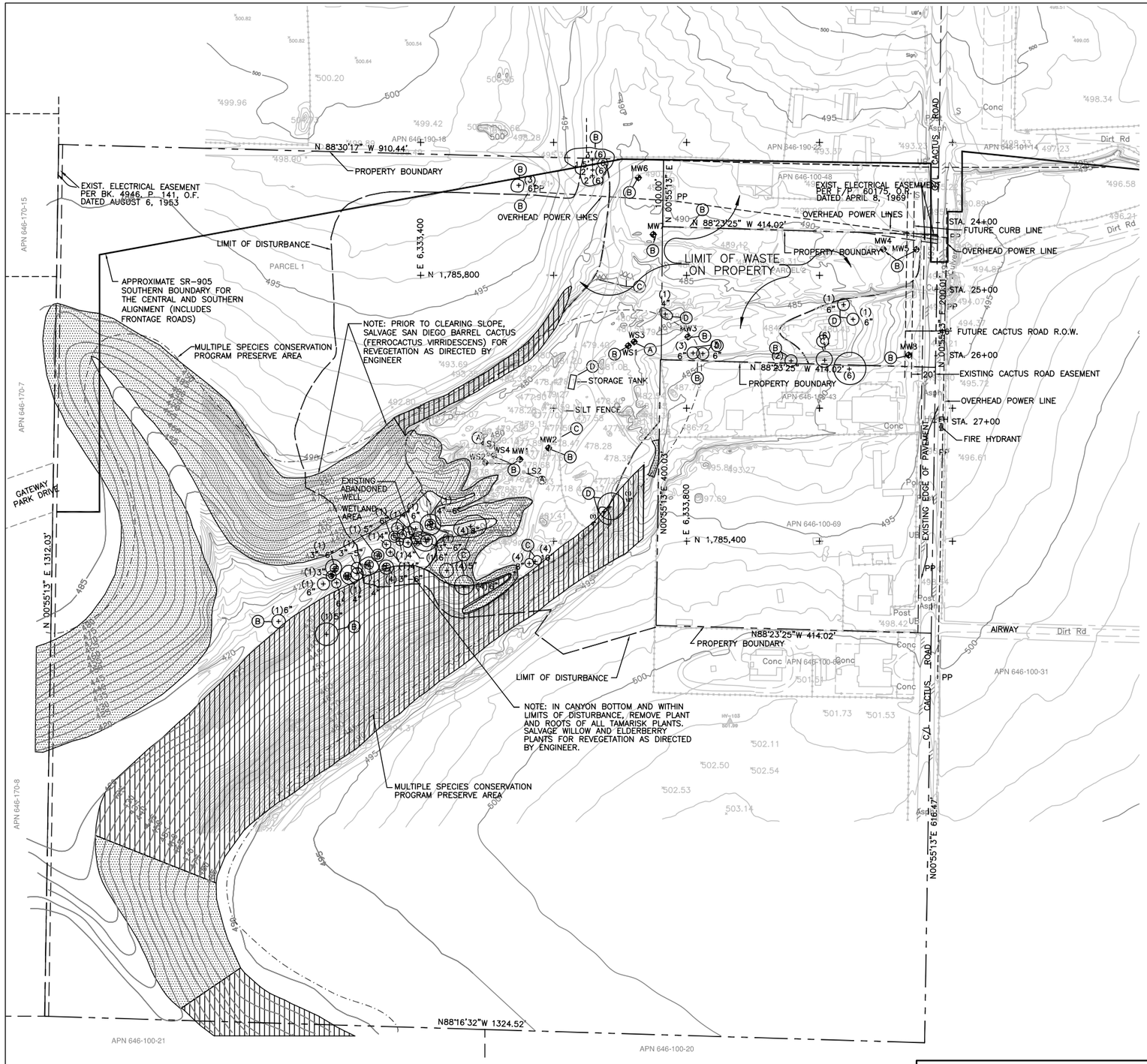

0 80 160 FEET
APPROXIMATE SCALE: 1" = 80'

SLOPE ANALYSIS

AREA WITH SLOPE LESS THAN TWENTY-FIVE PERCENT (25%) IS 77% (27.2 AC)

AREA WITH SLOPE TWENTY-FIVE PERCENT (25%) TO THIRTY-FIVE PERCENT (35%) IS 10% (3.7 AC)

AREA WITH SLOPE GREATER THAN THIRTY-FIVE PERCENT (35%) IS 13.03% (4.6 AC)

EXPLANATION

APPROXIMATE DRIP LINE
TRUNK

APPROXIMATE DRIP LINE
CLUSTER OF TRUNKS

(1) TYPE OF TREE

5" DIAMETER OF TRUNK

TYPE OF TREE

SYMBOL	SCIENTIFIC NAME	COMMON NAME
(1)	SALIX SP.	WILLOW
(2)	SCHINUS MOLLE	CALIFORNIA PEPPER TREE
(3)	ACACIA SP.	ACACIA
(4)	TAMARIX SP.	TAMARISK
(5)	SAMBUCUS MEXICANA	MEXICAN ELDERBERRY
(6)	EUCALYPTUS SP.	EUCALYPTUS

CONSTRUCTION NOTES:

(A) ABANDON WELL AND LYSIMETERS PRIOR TO GRADING AS PER SPECIFICATIONS

(B) PROTECT IN-PLACE

(C) REMOVE AND DISPOSE OFFSITE

(D) RELOCATE AS DIRECTED BY THE ENGINEER

NOTES:

1. TOPOGRAPHY IS FROM ZENITH AERIAL, INC. DATE OF PHOTOGRAPHY: 10/12/94
2. COUNTY OF SAN DIEGO TOPOGRAPHIC SURVEY, MAY 4, 1978; SHEET 138-1761 USED FOR TOPOGRAPHY IN SOUTHERN AND WESTERN 300' OF PROPERTY SHOWN HEREIN

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REGISTERED PROFESSIONAL ENGINEER SHAHRIAR SHAHIN Exp. 3/2004 CIVIL STATE OF CALIFORNIA

PRIVATE CONTRACT

EXISTING TOPOGRAPHY AND SITE IMPROVEMENTS:

SESI PROPERTY CLOSURE PROJECT

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 3 OF 14 SHEETS

W.O. NO. 420058

FOR CITY ENGINEER _____ DATE _____

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1784 - 6331
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INSPECTOR _____ DATE COMPLETED _____

31928-3-D

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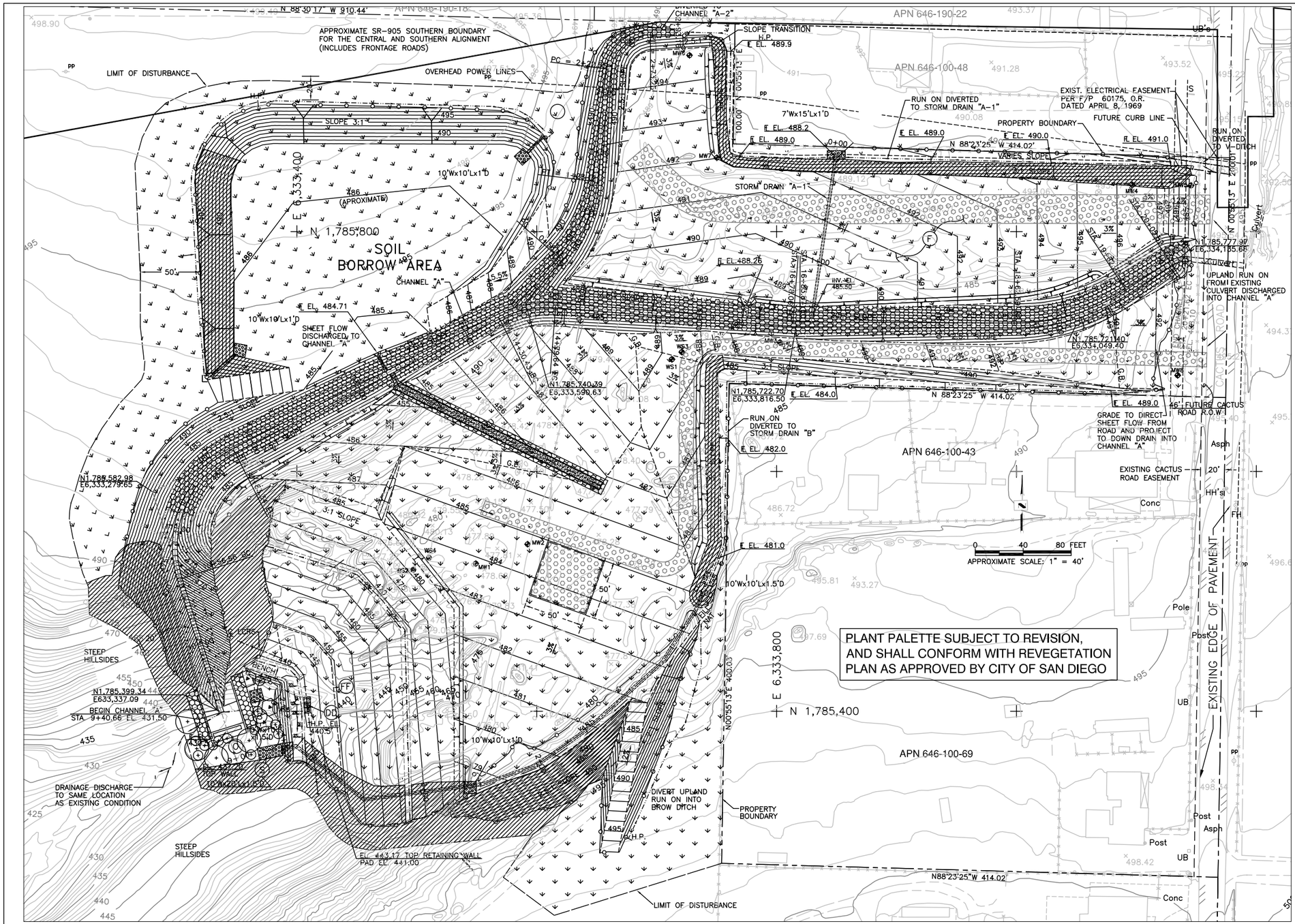

SEEDING MIX

Native Grassland Seed Mix

Scientific Name	Common Name	Approximate Pounds of Seed/Acre
Bloomeria crocea	Common Goldenstar	1.0
Bromus carinatus	California Brome	6.0
Dichelostemma capitatum	Blue Dicks	1.0
Encelia californica	California Encelia	2.0
Eschscholzia californica	California Poppy	3.0
Hordeum californicum	California Barley	5.0
Lotus scoparius	Deerweed	3.0
Lupinus bicolor	Miniature Lupine	3.0
Nassella cernua	Nodding Stipa	1.0
Nassella lepida	Foothill Needlegrass	1.0
Nassella pulchra	Purple Needlegrass	3.0
Poa secunda ssp. secunda	Bluegrass	3.0
Sisyrinchium bellum	Blue-Eyed Grass	1.0
Viguiera laciniata	San Diego Sun Flower	3.0
Vulpia microstacys	Zorro Grass	2.0

Sage Scrub Seed Mix

Scientific Name	Common Name	Approximate Pounds of Seed/Acre
Artemisia californica	California Sagebrush	2.0
Artemisia palmeri	Tall Sagebrush	2.0
Baccharis pilularis	Coyote Brush	0.5
Bromus carinatus	Brome Grass	2.0
Dichelostemma capitatum	Blue Dicks	1.0
Encelia californica	California Encelia	1.0
Ericameria palmeri	Palmers Goldenbush	0.5
Eriogonum fasciculatum	California Buckwheat	3.0
Eriophyllum confertiflorum	Golden Yarrow	1.0
Eschscholzia californica	California Poppy	1.0
Gnaphalium bicolor	Bicolored Everlasting	0.5
Gnaphalium californicum	California Everlasting	0.5
Helianthemun scoparium	California Rush Rose	1.0
Hordeum californicum	California Barley	1.0
Isocoma menziesii	Coast Goldenbush	2.0
Iva hayesiana	San Diego Poverty Weed	3.0
Lasthenia californica	Goldfields	1.0
Layia platyglossa	Tidy Tips	1.0
Leymus condensatus	Giant Wild Rye	1.0
Lotus scoparium	Deerweed	2.0
Lupinus bicolor	Miniature Lupine	2.0
Lupinus succulentus	Arroyo Lupine	2.0
Malocothamnus fasciculatius	Mesa Bushmallow	1.0
Melica imperfecta	Coast Range Melic	1.0
Muhlenbergia rigens	Deergrass	1.0
Nassella cernua	Nodding Stipa	1.0
Nassella lepida	Foothill Needlegrass	1.0
Nassella pulchra	Purple Needlegrass	3.0
Plantago erecta	Plantain	1.0
Salvia apiana	White Sage	2.0
Salvia mellifera	Black Sage	1.5

HARDSCAPE AREAS

RIP-RAP OR GABION

GRAVEL

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PRIVATE CONTRACT

REVEGETATION PLAN:

SESI PROPERTY CLOSURE PROJECT

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 4 OF 14 SHEETS

W.O. NO. 420058

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31928-4-D

CONTAINER PLANTS:

SYMBOL	SCIENTIFIC NAME	COMMON NAME	SIZE
⊕	BACCHARIS GLUTINOSA	MULE FAT	1 GAL
+	SALIX GOODDINGII	BLACK WILLOW	1 GAL
▲	SAMBUCUS MEXICANA	MEXICAN ELDERBERRY	5 GAL

NOTES:

1. TOPOGRAPHY IS FROM ZENITH AERIAL, INC. DATE OF PHOTOGRAPHY: 10/12/94

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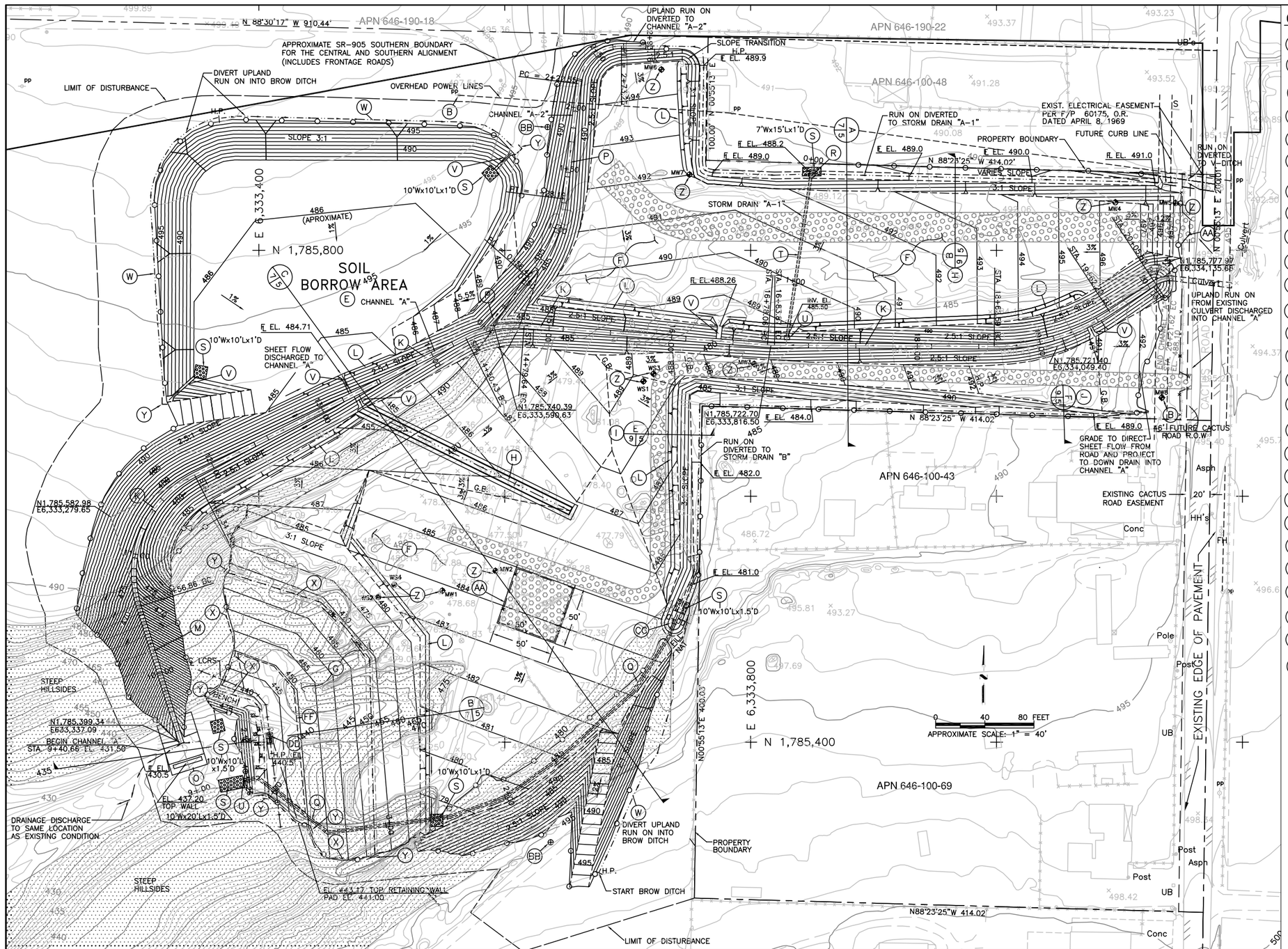

CONSTRUCTION NOTES:

- (B) PROTECT IN-PLACE
- (E) GRADE BORROW AREA TO THE GENERAL LINES AND GRADES FOR SIDE SLOPES AND LEAVE BOTTOM OF EXCAVATION TO DRAIN. ADJUST FINAL SLOPE LOCATIONS AND BOTTOM OF EXCAVATION AS DIRECTED BY THE ENGINEER.
- (F) CONSTRUCT FINAL COVER PER A 9 5
- (G) CONSTRUCT FINAL COVER FOR FRONT SLOPE PER D 9 5
- (H) CONSTRUCT ASPHALT CONCRETE SWALE PER B 9 5
- (I) CONSTRUCT TOE OF SLOPE KEY AND 4' WIDE PERIMETER PERIMETER V-DITCH PER E 9 5
- (J) CONSTRUCT TOE OF SLOPE KEY AND 3' WIDE V-DITCH PER F 9 5
- (K) CONSTRUCT MIN.3.5' HIGH BY 4' WIDE TRAPEZOIDAL CHANNEL "A" PER A 10 5,6
- (L) CONSTRUCT 1.5' HIGH EARTH BERM PER C 9 5
- (M) CONSTRUCT 4' WIDE X 3.5' DEEP TRAPEZOIDAL CONCRETE CHANNEL PER SAN DIEGO STD. DWG. D-71.
- (O) CONSTRUCT GABION AND RIP-RAP STILLING BASIN PER E 10 5,6
- (P) CONSTRUCT 2.5' HIGH BY 4' WIDE TRAPEZOIDAL CHANNEL "A-2" PER B 10 5
- (Q) CONSTRUCT 30" DIA PRIVATE HDPE STORM DRAIN LINE "B" PER A 12 5
- (R) CONSTRUCT STRAIGHT HEADWALL – TYPE A PER SAN DIEGO STD. DWG. D-30
- (S) CONSTRUCT RIP-RAP PER DETAIL ON SHEET 12 AND PER DIMENSIONS SHOWN ON PLANS
- (T) INSTALL 18" PRIVATE HDPE STORM DRAIN PER B 12 5
- (U) CONSTRUCT EARTH CHANNEL ENTRY PER E 10 5
- (V) CONSTRUCT ASPHALT CONCRETE DOWNDRAIN PER SAN DIEGO STD. DWG.D-22
- (W) CONSTRUCT BROW DITCH – TYPE A PER SAN DIEGO STD. DWG. D-75
- (X) CONSTRUCT DITCH – TYPE D PER SAN DIEGO STD. DWG. D-75
- (Y) CONSTRUCT16" HIGH MASONRY CONCRETE UNIT SPLASH WALL
- (Z) MODIFY MONITORING WELL COMPLETIONS PER D 11 5
- (AA) INSTALL 6' HIGH CHAIN-LINK FENCE WITH GATES PER SAN DIEGO STD. DWGS. M-5, M-6 AND M-20
- (BB) INSTALL SETTLEMENT SURVEY MONUMENT PER G 9 5
- (CC) CONSTRUCT STORMDRAIN INLET APRON PER SAN DIEGO STD. DWG. D-39
- (DD) CONSTRUCT RISER PIPE SURFACE COMPLETION PER A 11 8
- (FF) EXTEND DRAINAGE ROCK/GEOTEXTILE BLANKET TO ELEVATION 440 IN ALL AREAS UP-CANYON OF CENTERLINE AND BELOW BASE OF FOUNDATION LAYER

LEGEND:

- GRAVEL PAVEMENT
- STEEP HILLSIDES >25%

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REGISTERED PROFESSIONAL ENGINEER SHAHRIAR SHAHIN No. C 62340 Exp. 3/2004 CIVIL STATE OF CALIFORNIA

PRIVATE CONTRACT

FINAL COVER GRADING PLAN:

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CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 5 OF 14 SHEETS

W.O. NO. 420058

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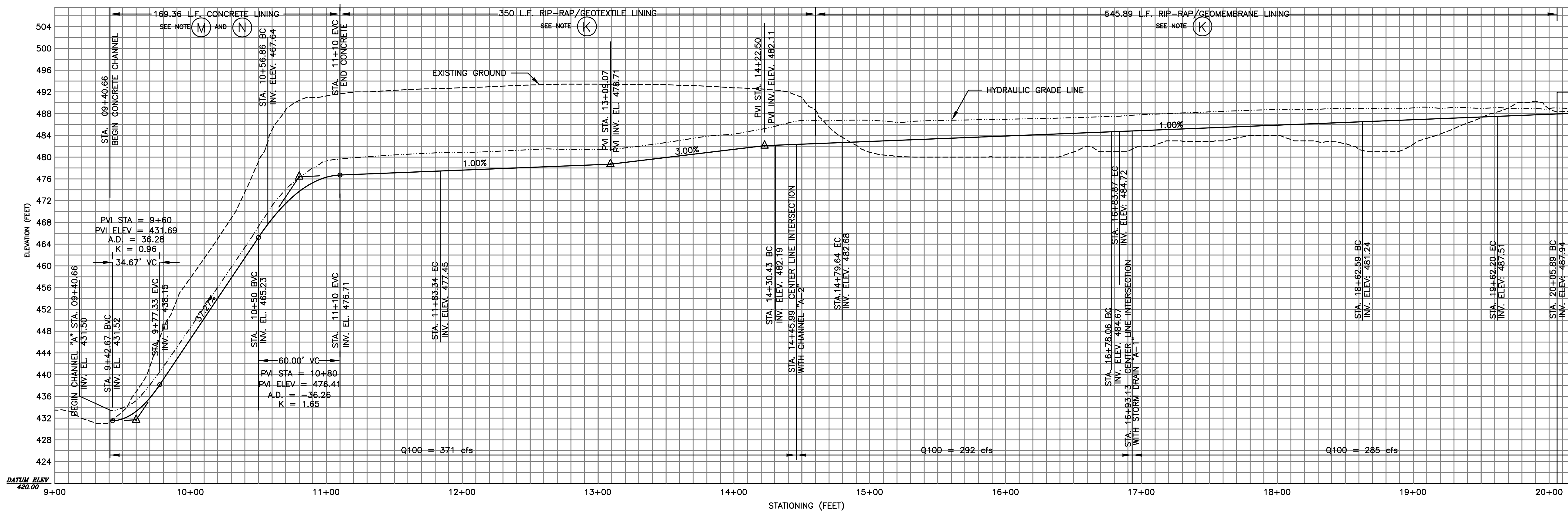


LINE "A" PROFILE

SCALE: HORIZONTAL 1"=40' & VERTICAL 1"=10'

NUMBER	DELTA	RADIUS	LENGTH	TANGENT
C1	80°31'10"	90.00'	126.48'	76.22'
C2	31°19'32"	90.00'	49.21'	25.23'
C3	04°09'31"	80.00'	5.81'	2.90'
C4	33°34'16"	170.00'	99.61'	51.28'
C5	40°01'52"	22.50'	15.72'	8.20'

CURVE TABLE

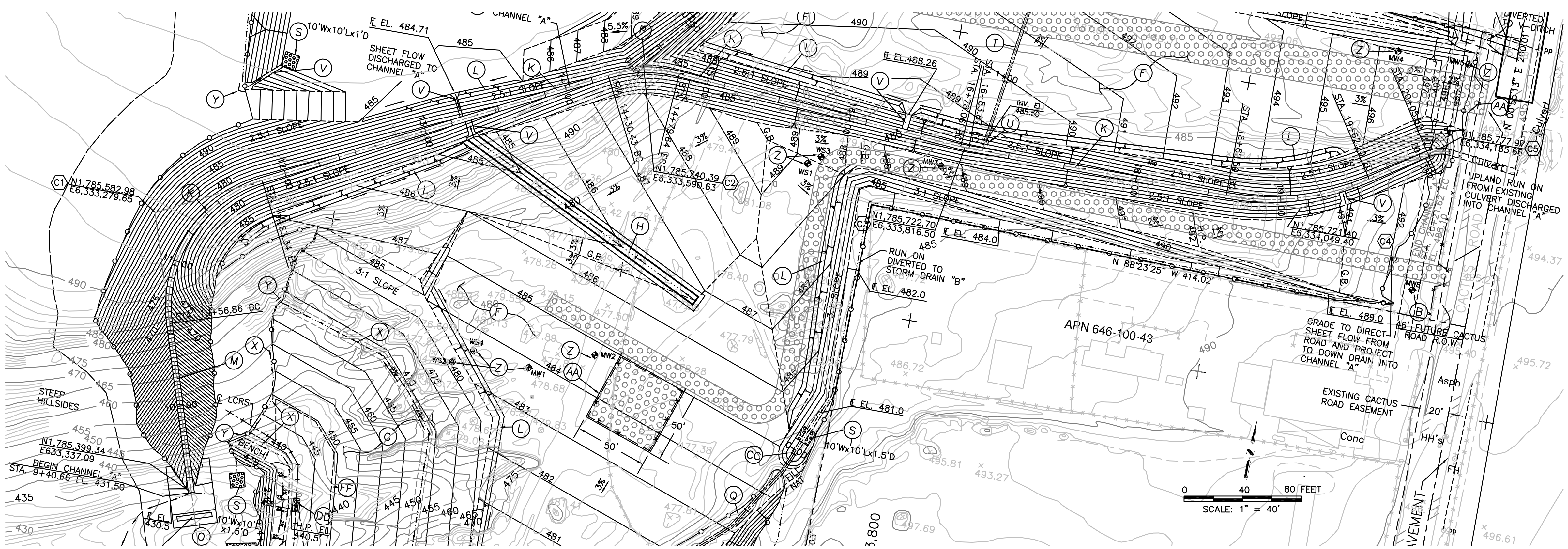
CONSTRUCTION NOTES:

(K) CONSTRUCT MIN.3.5' HIGH BY 4' WIDE TRAPEZOIDAL CHANNEL "A" PER A/10 5,6

(M) CONSTRUCT 4' WIDE X 3.5' DEEP CONCRETE CHANNEL PER SAN DIEGO STD. DWG. D-71.

(N) CONSTRUCT 10" THICK 2.5' DEEP CUT OFF WALL AT CHANNEL ENDS AND EVERY 10' VERTICAL, PER SAN DIEGO STD. DWG. D-72

(HH) INSTALL 48" DIA R.C.P. SAN DIEGO STD. DWGS. D-60, D-61 AND D-62



PLAN VIEW

SCALE: 1"=40'

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REGISTERED PROFESSIONAL ENGINEER
SHAHRIAR SHAHIN
NO. C 042940
Exp. 3/2004
CIVIL
STATE OF CALIFORNIA

PRIVATE CONTRACT

DRAINAGE CHANNEL "A" PLAN AND PROFILE:

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CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 6 OF 14 SHEETS

W.O. NO. 420058

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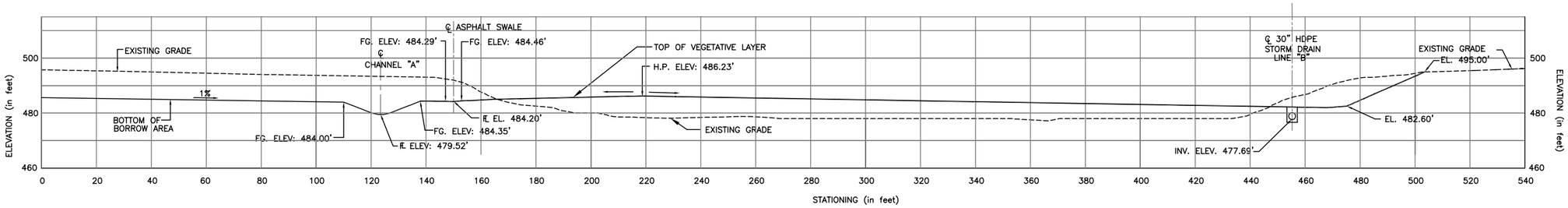
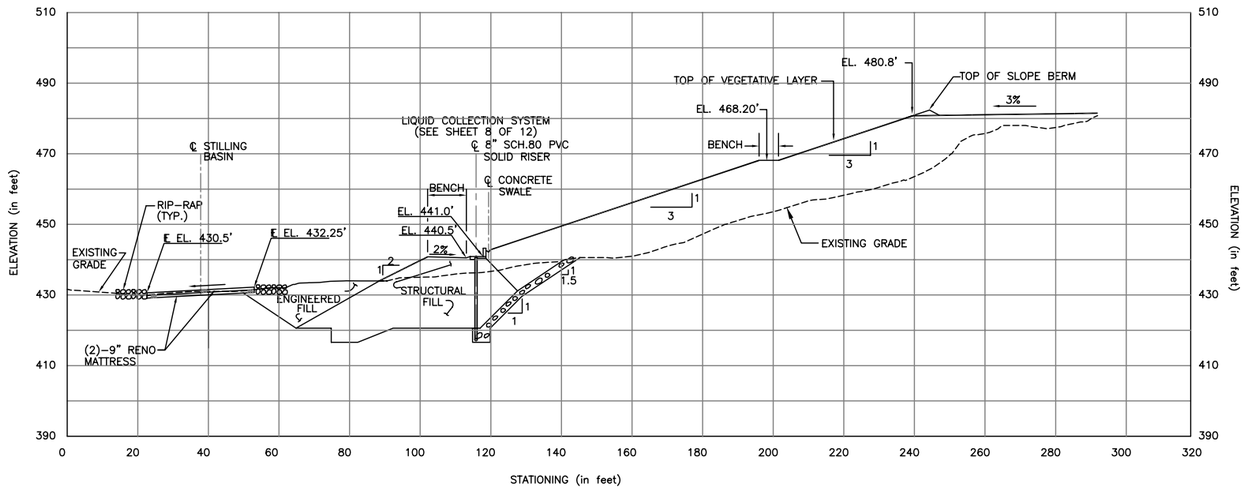
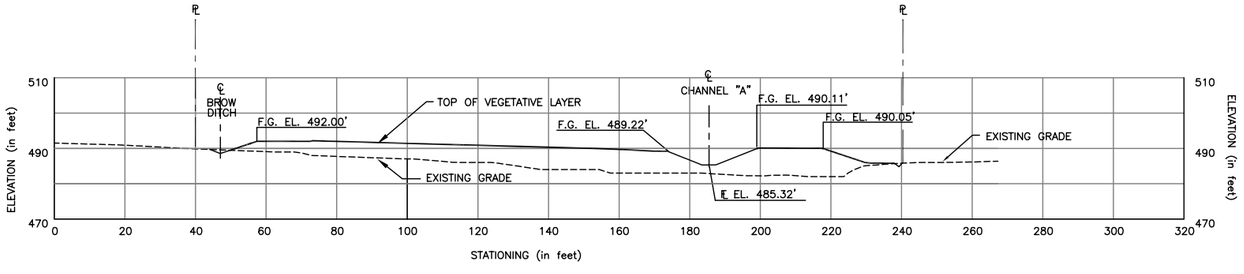


SECTION C (7 | 5)
Scale: 1" = 20'



SECTION B (7 | 5)
Scale: 1" = 20'



SECTION A (7 | 5)
Scale: 1" = 20'

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REGISTERED PROFESSIONAL ENGINEER — SIAMAK SIAMI — No. 49040 — Exp. 3/2006 — CIVIL — STATE OF CALIFORNIA

PRIVATE CONTRACT

LANDFILL CLOSURE CROSS-SECTIONS:

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CITY OF SAN DIEGO, CALIFORNIA
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SHEET 7 OF 14 SHEETS

W.O. NO. 420058

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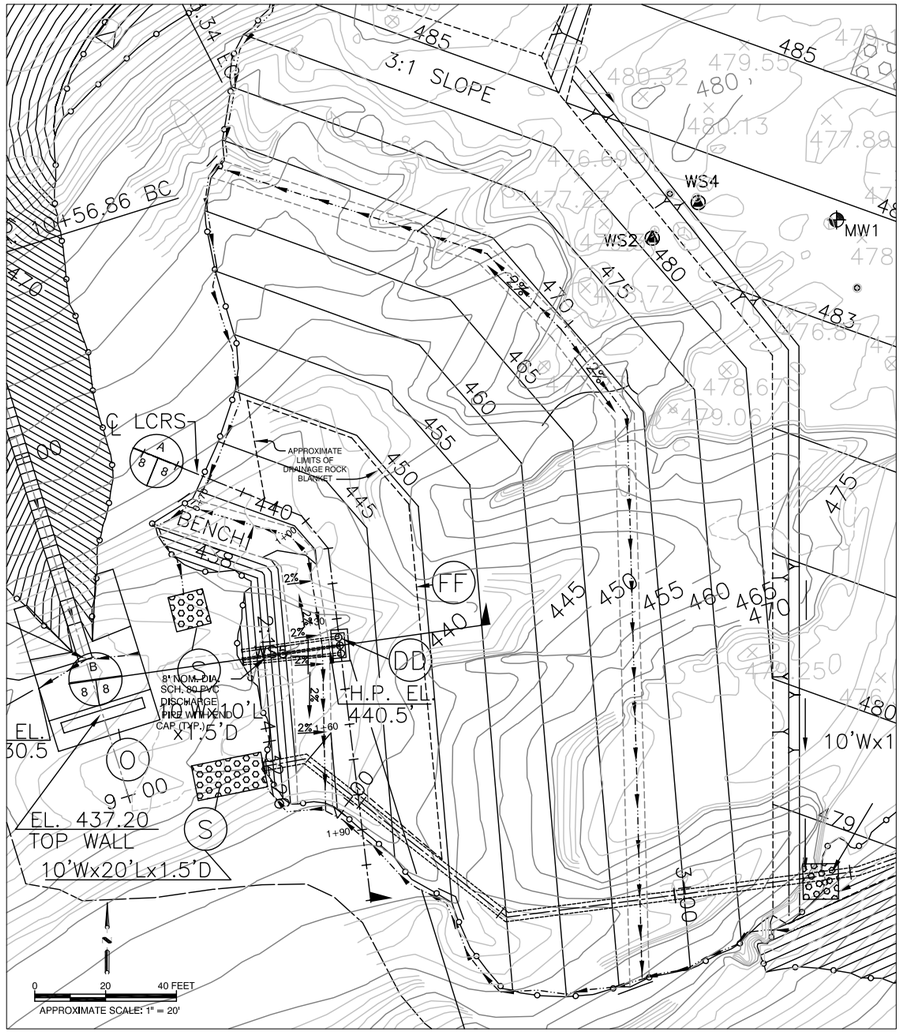


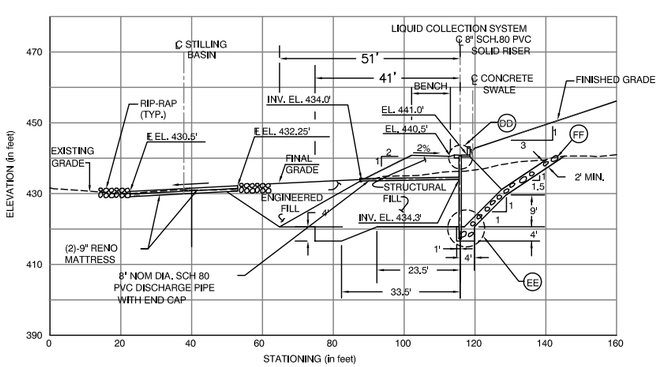
COORDINATE TABLE OF 8" NOM. DIA. SCH. 80 PVC SLOTTED PIPE						
STATION	NORTHING	EASTING	FINISHED GRADE ELEV. (ft.)	BOTTOM BUTRESS KEY ELEV. (ft.)	COLLECTION PIPE INVERT ELEV. (ft.)	DESCRIPTION
0+86.50	1,785,443.95	6,333,387.36	441.22	418.24	414.23	Begin Gravel Trench
0+87.00	1,785,443.77	6,333,387.82	441.21	418.23	414.52	Begin Subdrain Collector Pipe
0+98.12	1,785,439.62	6,333,398.14	441.13	418.13	414.42	Angle Point
1+10.00	1,785,430.45	6,333,405.69	441.03	418.00	414.29	Angle Point
1+35.00	1,785,405.63	6,333,408.68	441.00	417.75	414.04	Auxiliary Riser Pipe
1+40.00	1,785,400.66	6,333,409.28	441.00	417.70	413.99	Main Riser Pipe
1+75.50	1,785,365.42	6,333,413.52	441.99	418.05	414.34	End Subdrain Collector Pipe
1+76.00	1,785,364.92	6,333,413.54	442.00	418.06	414.35	End Gravel Trench

CONSTRUCTION NOTES:

(DD) CONSTRUCT RISER PIPE SURFACE COMPLETION PER A 11|8

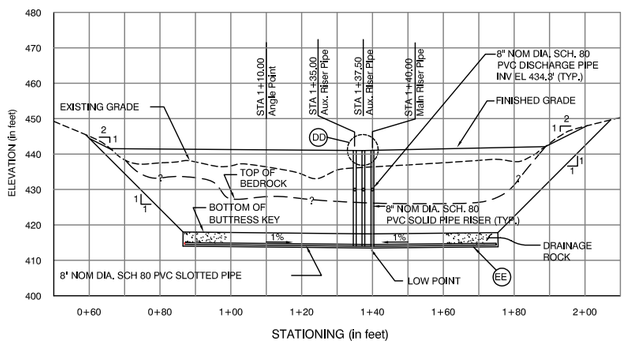
(EE) CONSTRUCT SUBDRAIN COLLECTION TRENCH PER B 11|8

(FF) EXTEND DRAINAGE ROCK/GEOTEXTILE BLANKET TO ELEVATION 440 IN ALL AREAS UP-CANYON OF CENTERLINE AND BELOW BASE OF FOUNDATION LAYER



TOE OF SLOPE BUTRESS AND LIQUID COLLECTION SYSTEM SECTION B 8|8

Scale: 1" = 20'



LIQUID COLLECTION SYSTEM PROFILE A 8|8

Scale: 1" = 20'

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PRIVATE CONTRACT

SLOPE BUTTRESS FILL AND LIQUID COLLECTION SYSTEM:

SESI PROPERTY CLOSURE PROJECT

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 8 OF 14 SHEETS

W.O. NO. 420058

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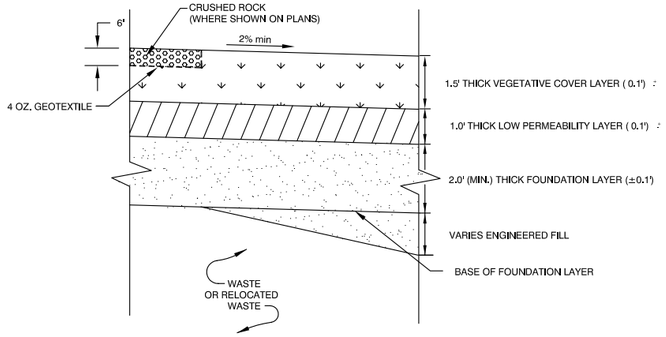
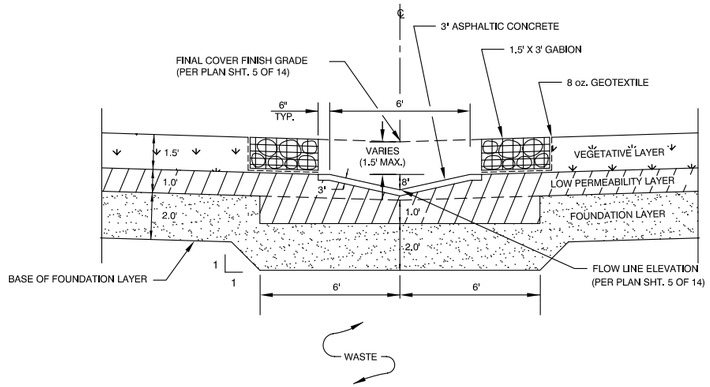


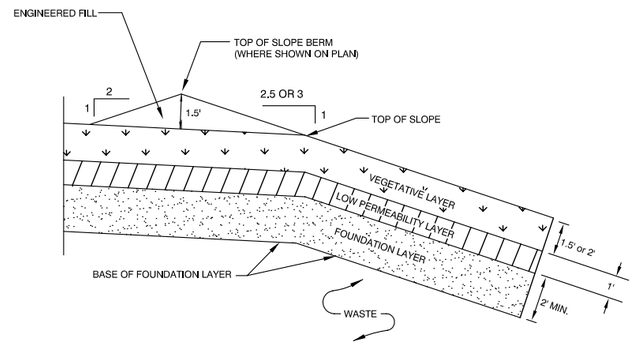
TYPICAL SECTION FINAL COVER SYSTEM (A 9|5)

Scale: 1" = 2'



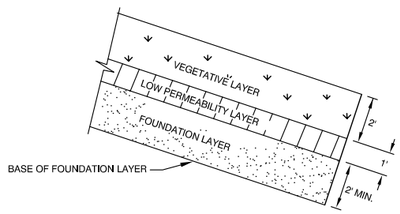
ASPHALT CONCRETE SWALE (B 9|5)

Scale: 1" = 3'



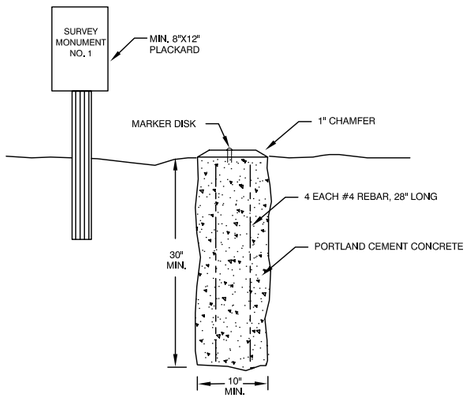
TOP OF SLOPE BERM (C 9|5)

Scale: 1" = 3'



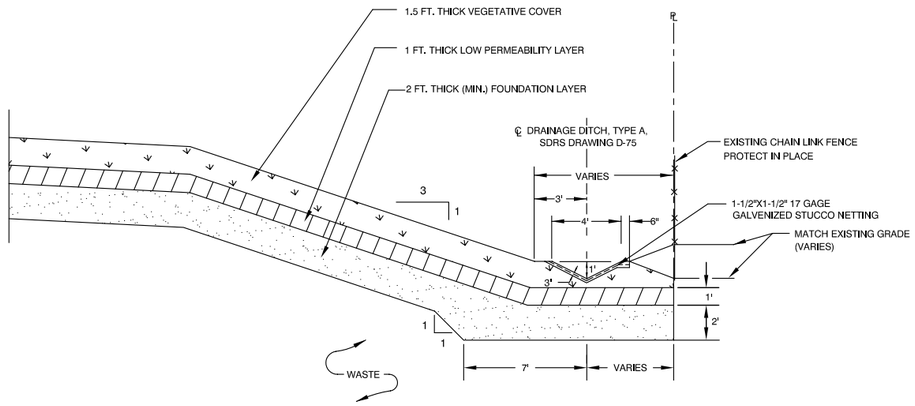
FINAL COVER SYSTEM - FRONT SLOPE (D 9|5)

Scale: 1" = 3'



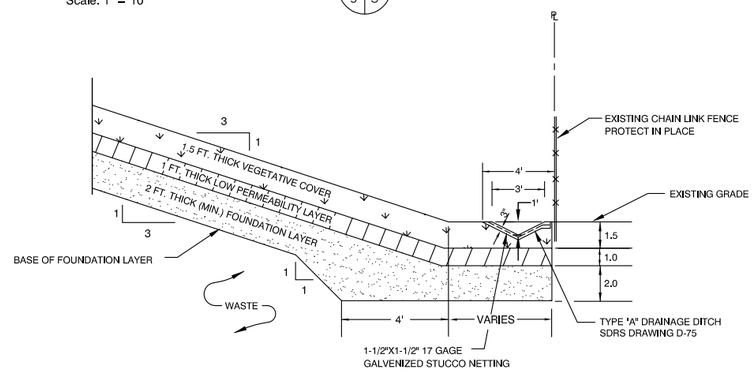
SETTLEMENT SURVEY MONUMENT (G 9|5)

Scale: 1" = 10"



TOE OF SLOPE KEY AND PERIMETER V-DITCH (E 9|5)

Scale: 1" = 4'



TOE OF SLOPE KEY (F 9|5)

Scale: 1" = 4'

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REGISTERED PROFESSIONAL ENGINEER SHAHRIAR SHAHIN No. 62400 Exp. 3-2006 CIVIL STATE OF CALIFORNIA

PRIVATE CONTRACT

FINAL COVER DETAILS

SESI PROPERTY CLOSURE PROJECT

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 9 OF 14 SHEETS

W.O. NO. 420058

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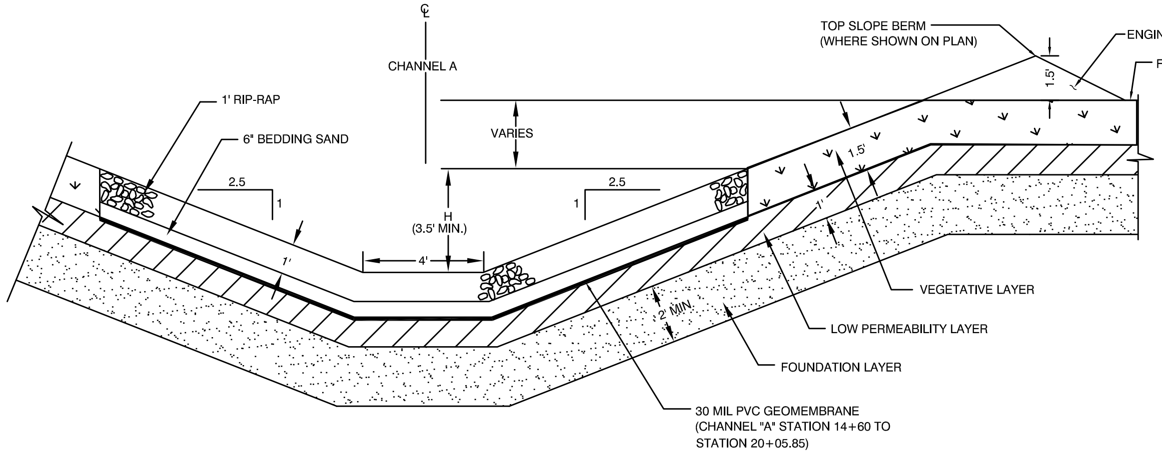
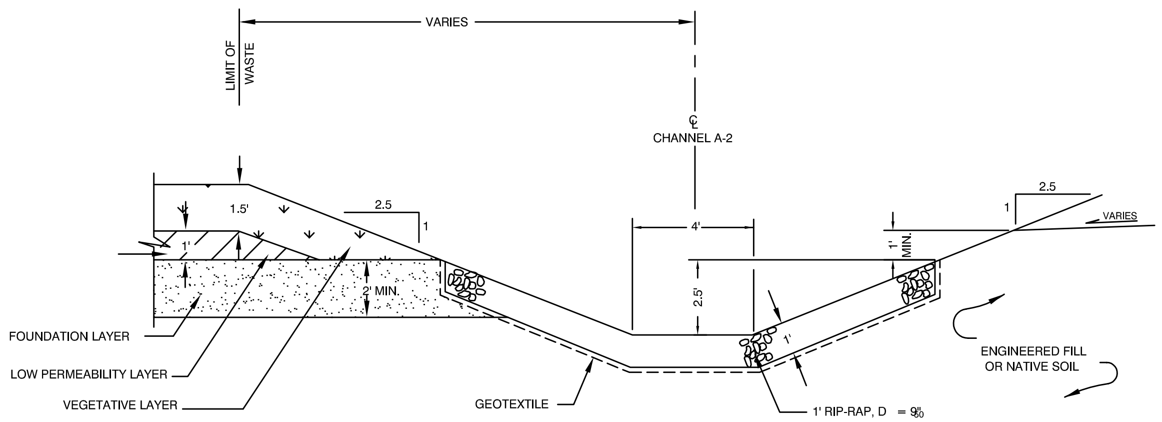


STATIONS		DEPTH (H) (FEET)
FROM:	TO:	
11+10	12+50	4.5
12+50	12+60	Transition
12+60	14+00	4.0
14+00	14+10	Transition
14+10	14+30	4.5
14+30	14+40	Transition
14+40	14+75	5.5
14+75	14+85	Transition
14+85	15+20	5.0
15+20	15+30	Transition
15+30	18+60	4.0
18+60	18+70	Transition
18+70	20+05.89	3.5

NOTE: FINAL COVER AND GEOMEMBRANE SECTION APPLIES BETWEEN CHANNEL A STATIONS 14+60 AND 20+05.89. BETWEEN STATIONS 11+10 AND 14+60, THE RIP-RAP AND BEDDING SAND ARE TO BE PLACED ON NATIVE SOIL.

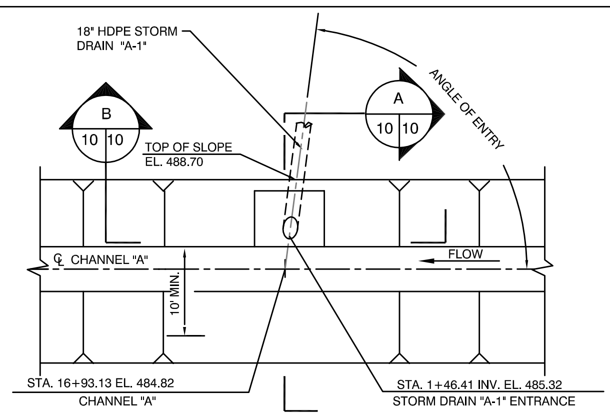
TYPICAL SECTION - CHANNEL A (A, 10 | 5,6)

Scale: 1" = 3'



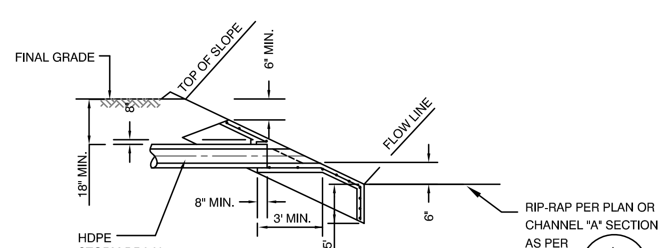
TYPICAL SECTION - CHANNEL A-2 (B, 10 | 5,6)

Scale: 1" = 3'



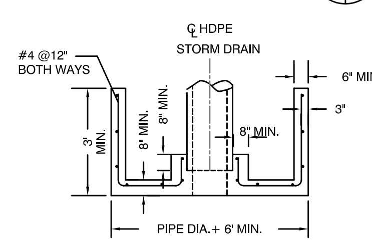
PLAN - STORM DRAIN "A-1"

NOT TO SCALE



SECTION (A, 10 | 10)

NOT TO SCALE

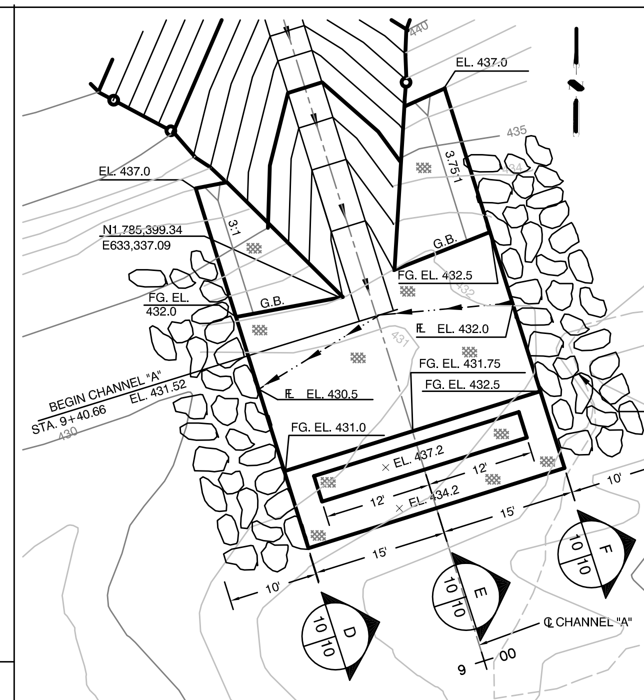


SECTION (B, 10 | 10)

NOT TO SCALE

EARTH CHANNEL ENTRY DETAIL (C, 10 | 5)

NOT TO SCALE

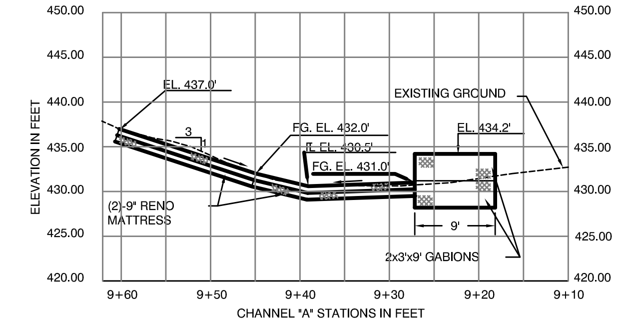


PLAN

SCALE: 1"=10'

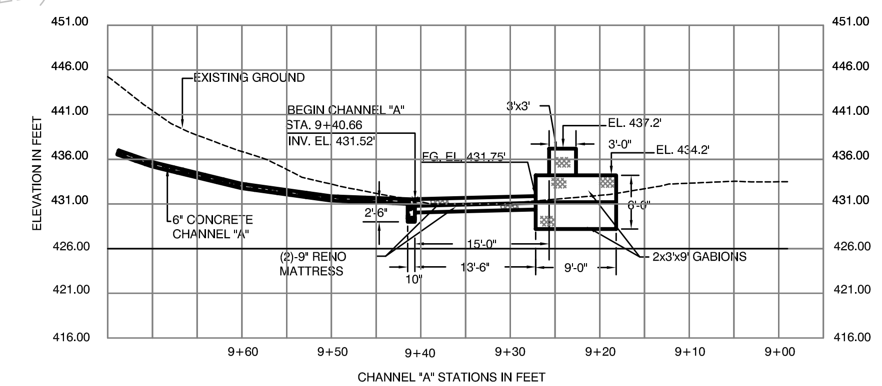
NATURAL ROCK RIP-RAP
SPECIFIC WEIGHT = 165 lbs/ft^3
BLANKET THICKNESS = 36"

% LIGHTER BY WEIGHT	LIMITS OF STONE WEIGHT IN POUNDS	
100	2333	933
50	691	467
15	346	146



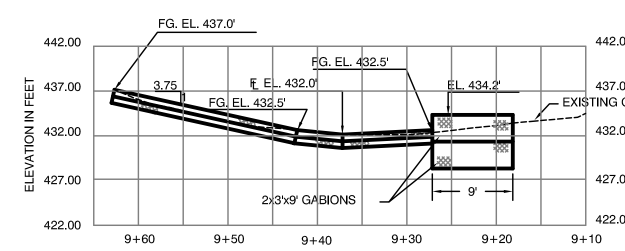
SECTION (D, 10 | 10)

SCALE: 1"=10'



SECTION (E, 10 | 10)

SCALE: 1"=10'



SECTION (F, 10 | 10)

SCALE: 1"=10'

STILLING BASIN DETAIL (G, 10 | 5,6)

Scale: 1" = 10'

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PRIVATE CONTRACT

DRAINAGE DETAILS:

SESI PROPERTY CLOSURE PROJECT

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 10 OF 14 SHEETS

W.O. NO. 420058

FOR CITY ENGINEER — DATE

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144-1771
LAMBERT COORDINATES

CONTRACTOR — DATE STARTED
INSPECTOR — DATE COMPLETED

31928-10-D

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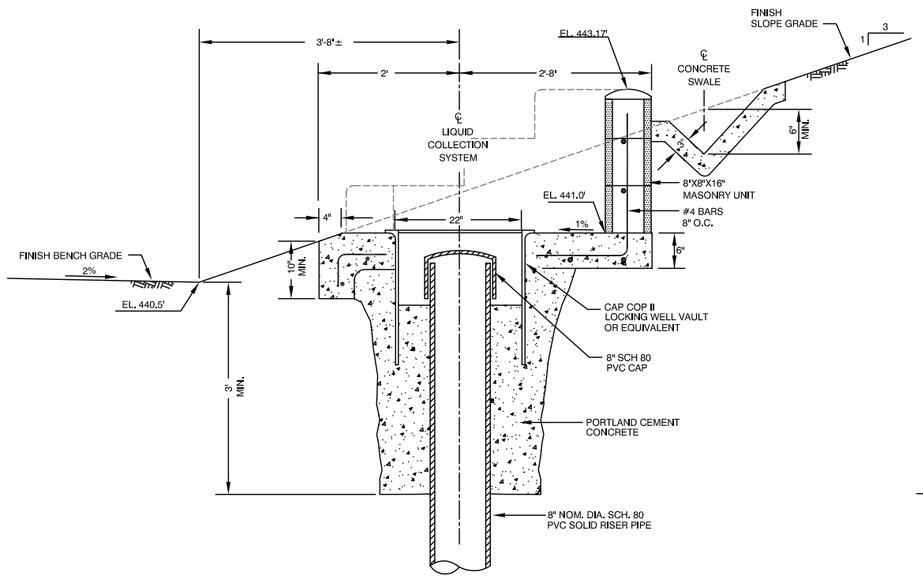
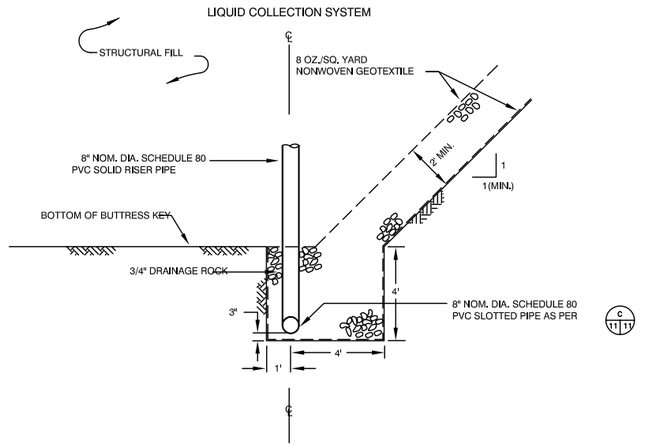


SECTION B-B

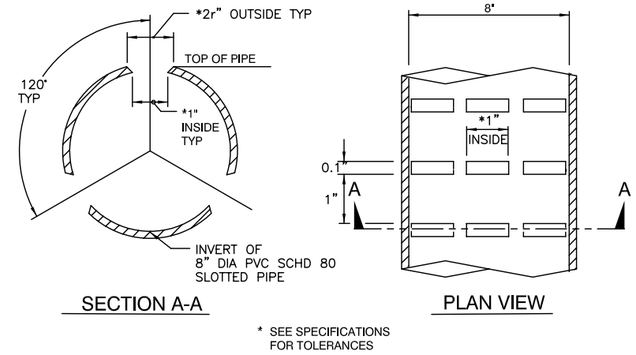
Scale: 1" = 1'



SUBDRAIN COLLECTION TRENCH

Scale: 1" = 3'

B
11 8



SECTION A-A

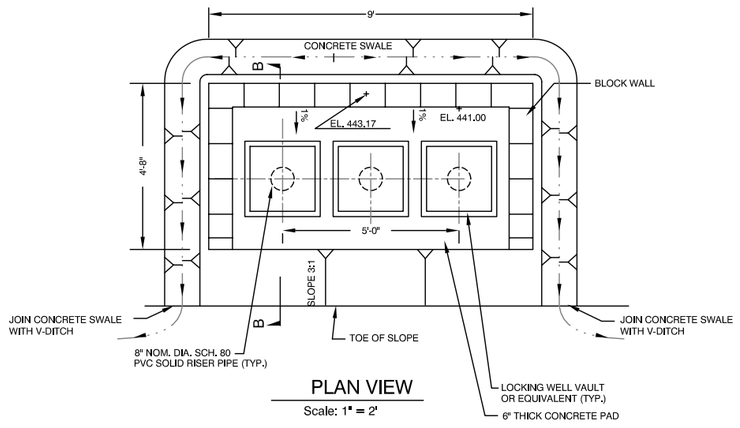
PLAN VIEW

* SEE SPECIFICATIONS
FOR TOLERANCES

SLOTTED COLLECTION PIPE DETAIL

N.T.S.

C
11 11



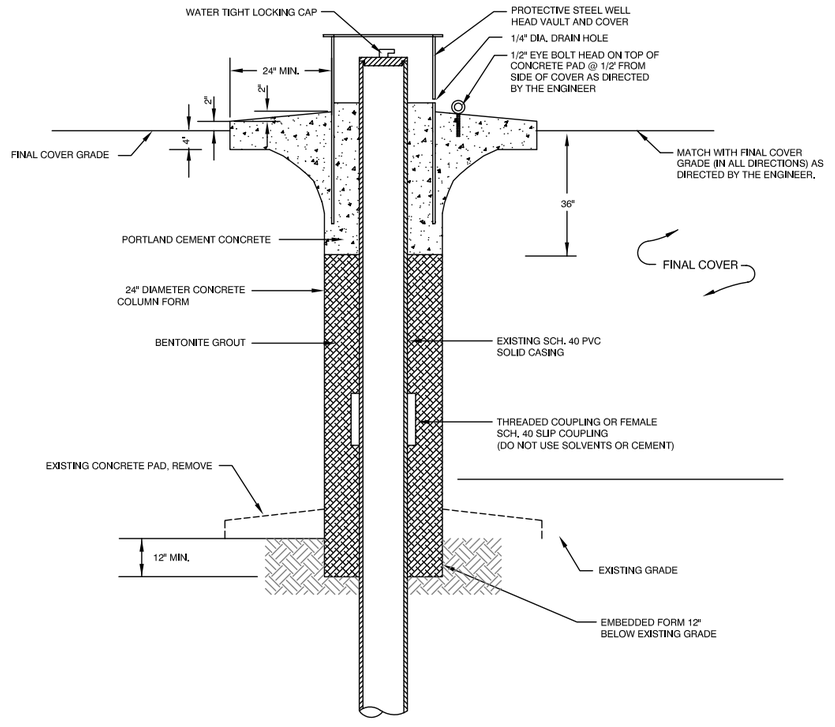
PLAN VIEW

Scale: 1" = 2'

RISER PIPE SURFACE COMPLETION

AS SHOWN

A
11 8



MONITORING WATER WELL EXTENSION DETAIL

N.T.S.

D
11 5

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REGISTERED PROFESSIONAL ENGINEER SHAHRIAR SHAHIN No. C 62580 Exp. 3/31/06 CIVIL STATE OF CALIFORNIA

PRIVATE CONTRACT

ENVIRONMENTAL MONITORING AND
CONTROL SYSTEM DETAILS:
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CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 11 OF 14 SHEETS

W.O. NO. 420058

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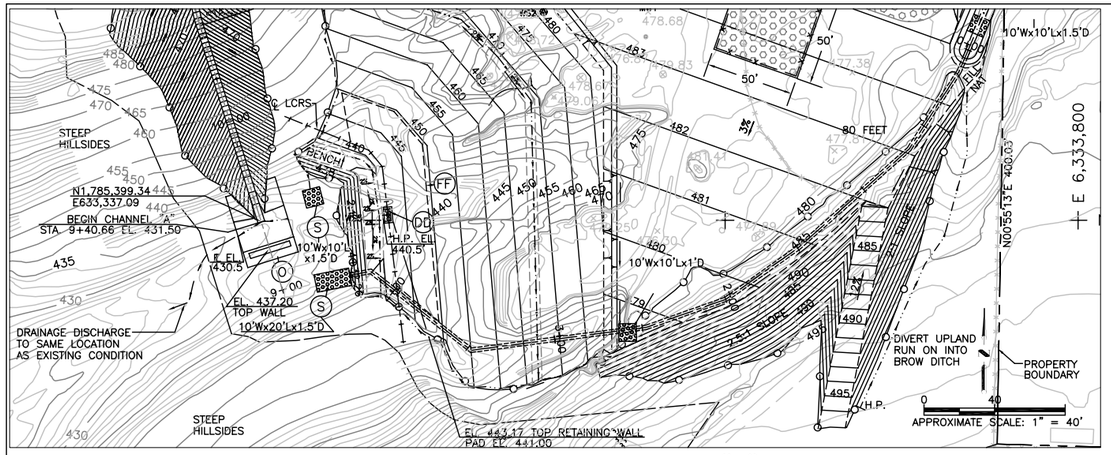
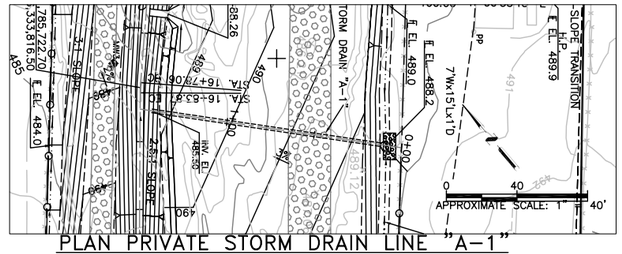


PLAN PRIVATE STORM DRAIN LINE "B"

SCALE: 1" = 40'

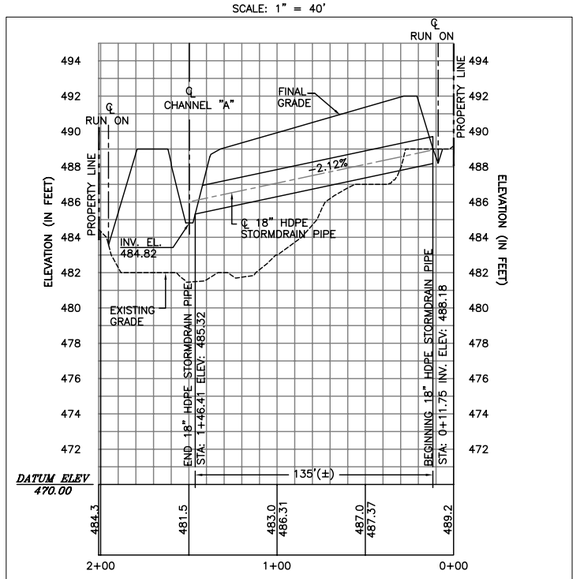
COORDINATE TABLE PRIVATE STORM DRAIN LINE "A-1"				
STATION	NORTHING	EASTING	LAT. "A-1" PIPE INVERT ELEV. (FT.)	DESCRIPTION
0+11.75	1785859.10	6333848.83	488.18	Beginning 18" HDPE Stormdrain Pipe
0+50.00	1785821.26	6333843.24	487.37	
1+00	1785771.80	6333835.93	486.31	
1+46.41	1785725.89	6333829.14	485.32	End 18" HDPE Stormdrain Pipe at Channel "A"



PLAN PRIVATE STORM DRAIN LINE "A-1"

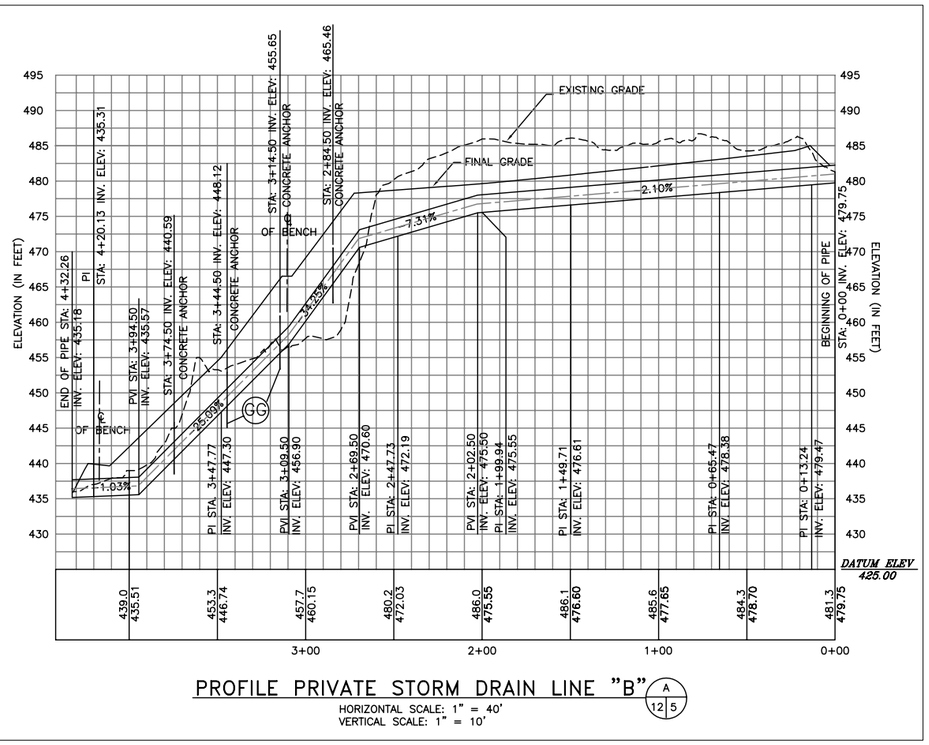
SCALE: 1" = 40'

COORDINATE TABLE PRIVATE STORM DRAIN LINE "B"				
STATION	NORTHING	EASTING	STORM DRAIN "B" PIPE INVERT ELEV. (FT.)	DESCRIPTION
0+00	1785496.40	6333737.76	479.75	Beginning 30" HDPE Stormdrain Pipe
0+13.24	1785484.22	6333732.56	479.47	PI
0+50	1785453.33	6333712.64	478.80	
0+65.47	1785440.33	6333704.26	478.38	PI
1+00	1785417.37	6333678.47	477.65	
1+49.71	1785384.32	6333641.34	476.61	PI
1+50	1785384.15	6333641.11	476.60	
1+99.94	1785355.22	6333600.40	475.55	PI
2+00	1785355.20	6333600.34	475.55	
2+47.73	1785339.32	6333555.32	472.19	PI
2+50	1785339.03	6333553.08	472.03	
3+00	1785332.54	6333503.48	460.15	
3+47.77	1785326.36	6333456.14	447.30	PI
3+50	1785327.73	6333454.38	446.74	
4+00	178538.61	6333415.05	435.51	
4+20.13	1785371.04	6333399.22	435.31	PI
4+32.26	1785368.84	6333387.29	435.18	End 30" HDPE Stormdrain pipe



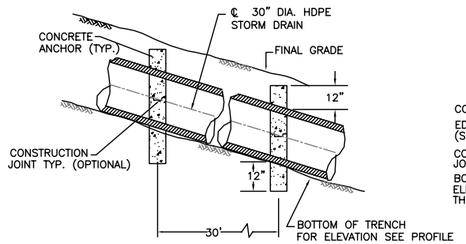
PROFILE PRIVATE STORM DRAIN LINE "A-1" (B | 12 | 5)

HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 4'



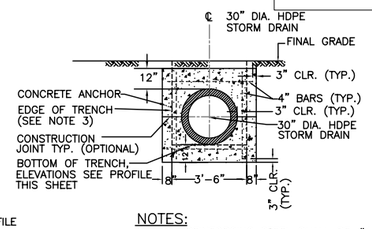
PROFILE PRIVATE STORM DRAIN LINE "B" (A | 12 | 5)

HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 10'



SLOPING PIPE CONCRETE ANCHOR DETAIL (C | 12 | 12)

NOT TO SCALE



NOTES:

1. ALL REINFORCING STEEL SHALL BE #4 BARS
2. CONCRETE SHALL BE CLASS 500-C-2500.
3. EMBED ANCHOR 8" MIN. INTO TRENCH SIDEWALLS

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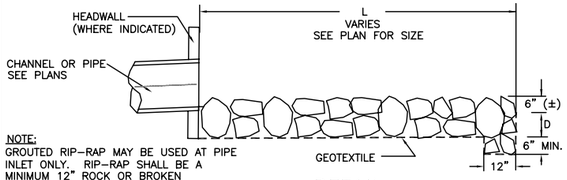
REGISTERED PROFESSIONAL ENGINEER SAMVIAR SHAMIN REN. 06/30 Exp. 3/2007 CIVIL STATE OF CALIFORNIA



NOTE:
GROUTED RIP-RAP MAY BE USED AT PIPE INLET ONLY. RIP-RAP SHALL BE A MINIMUM 12" ROCK OR BROKEN CONCRETE WITH 6" MIN. PROTRUSION TO PROVIDE ROUGHENED SURFACE.

DETAIL

NOT TO SCALE

CONSTRUCTION NOTES :

- (O) CONSTRUCT GABION AND RIP-RAP STILLING BASIN PER (E | 10 | 5,6)
- (Q) CONSTRUCT 30" DIA HDPE STORM DRAIN LINE "B" PER (A | 12 | 5)
- (R) CONSTRUCT STRAIGHT HEADWALL – TYPE A PER SAN DIEGO STD. DWG. D-30
- (S) CONSTRUCT RIP RAP PER DETAIL ON SHEET 12 AND PER DIMENSIONS SHOWN ON PLANS
- (T) CONSTRUCT 18" DIA HDPE STORM DRAIN PER (B | 12 | 5)
- (U) CONSTRUCT EARTH CHANNEL ENTRY PER (E | 10 | 5)
- (CC) CONSTRUCT STORMDRAIN INLET APRON PER SAN DIEGO STD. DWG. D-39
- (GG) CONSTRUCT CONCRETE ANCHOR BLOCK PER (C | 12 | 12)

PERMIT DESIGN, NOT FOR CONSTRUCTION

PRIVATE CONTRACT

PLANS AND PROFILES FOR STORM DRAIN LATERAL "A-1", LINE "B":

SESI PROPERTY CLOSURE PROJECT

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 12 OF 14 SHEETS

W.O. NO. 420058

FOR CITY ENGINEER _____ DATE _____

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INSPECTOR _____ DATE COMPLETED _____

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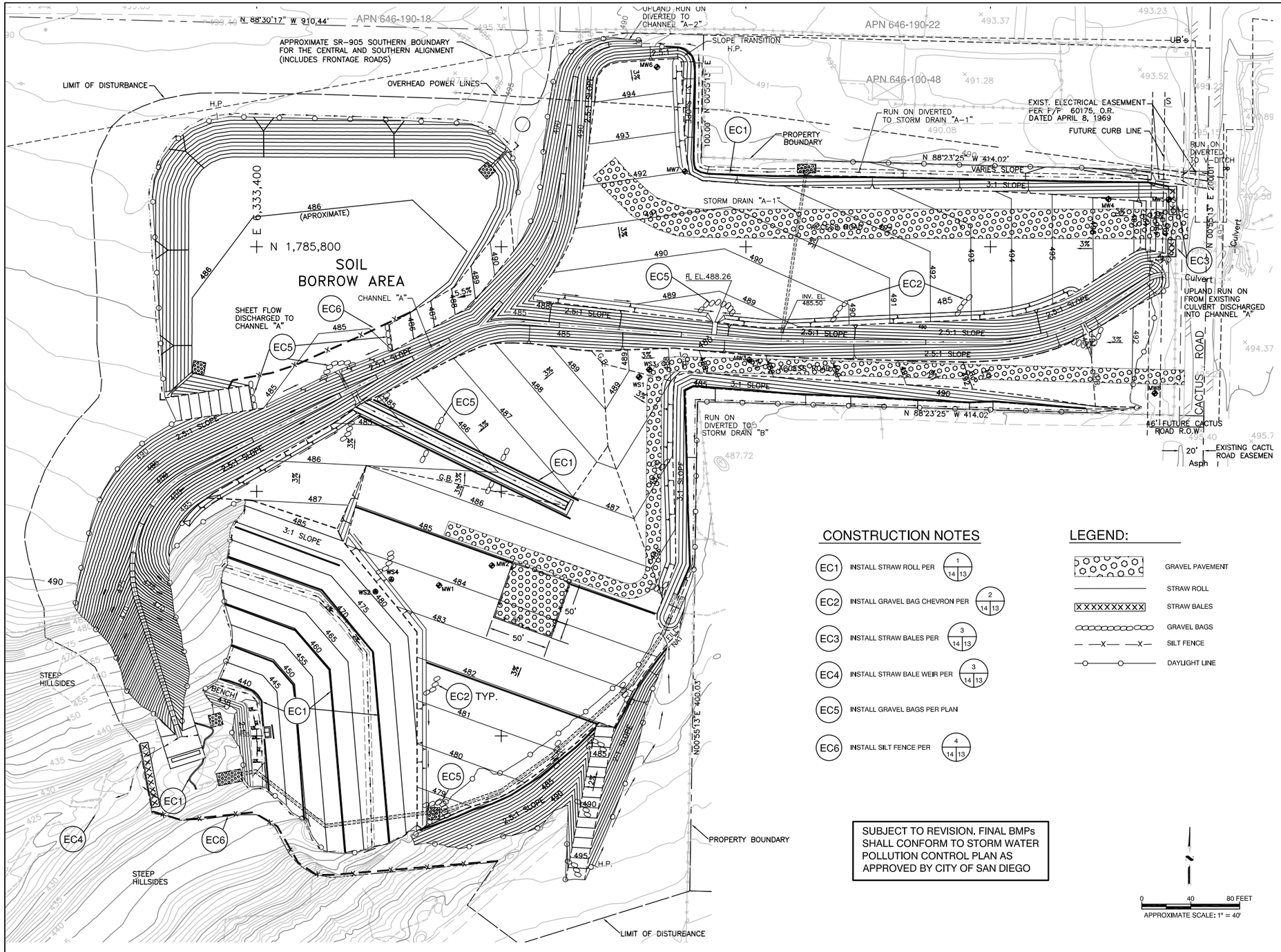

CONSTRUCTION NOTES

- EC1 INSTALL STRAW ROLL PER 1 (14 | 13)
- EC2 INSTALL GRAVEL BAG CHEVRON PER 2 (14 | 13)
- EC3 INSTALL STRAW BALES PER 3 (14 | 13)
- EC4 INSTALL STRAW BALE WEIR PER 3 (14 | 13)
- EC5 INSTALL GRAVEL BAGS PER PLAN
- EC6 INSTALL SILT FENCE PER 4 (14 | 13)

LEGEND:

- GRAVEL PAVEMENT
- STRAW ROLL
- STRAW BALES
- GRAVEL BAGS
- SILT FENCE
- DAYLIGHT LINE

SUBJECT TO REVISION. FINAL BMPs SHALL CONFORM TO STORM WATER POLLUTION CONTROL PLAN AS APPROVED BY CITY OF SAN DIEGO

0 40 80 FEET
APPROXIMATE SCALE: 1" = 40'

PERMIT DESIGN, NOT FOR CONSTRUCTION

EROSION CONTROL NOTES

TEMPORARY EROSION CONTROL PRIOR TO COMPLETION OF FINAL IMPROVEMENTS SHALL BE PERFORMED BY THE CONTRACTOR AS INDICATED BELOW:

1. FOR STORM DRAIN INLET, PROVIDE A SANDBAG SILT BASIN IMMEDIATELY UPSTREAM OF INLET AS INDICATED ON DETAILS.
2. FOR INLETS LOCATED AT SUMPS ADJACENT TO TOP OF SLOPES, THE CONTRACTOR SHALL ENSURE THAT WATER DRAINING TO THE SUMP IS DIRECTED INTO THE INLET AND THAT A MINIMUM OF 1.00' FREEBOARD EXISTS AND IS MAINTAINED ABOVE THE TOP OF THE INLET. IF FREEBOARD IS NOT PROVIDED BY GRADING SHOWN ON THESE PLANS, THE CONTRACTOR SHALL PROVIDE IT VIA TEMPORARY MEASURES, I.E., SANDBAGS OR DIKES.
3. THE GRADING CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANUP OF SILT AND MUD ON ADJACENT STREET DUE TO CONSTRUCTION ACTIVITY.
4. THE CONTRACTOR SHALL CHECK AND MAINTAIN LINED AND UNLINED DITCHES AFTER EACH RAINFALL.
5. THE CONTRACTOR SHALL REMOVE SILT AND DEBRIS AFTER EACH MAJOR RAINFALL, OR WHEN SILT REACHES AN ELEVATION OF 0.5' BELOW WEIR OPENING FOR SANDBAG BASINS.
6. EQUIPMENT AND WORKERS FOR EMERGENCY WORK SHALL BE MADE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON. ALL NECESSARY MATERIALS SHALL BE STOCKPILED ON SITE AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES WHEN RAIN IS IMMINENT.
7. DEVICES SHOWN ON PLAN SHALL NOT BE MOVED OR MODIFIED WITHOUT THE APPROVAL OF THE RESIDENT ENGINEER.
8. THE CONTRACTOR SHALL RESTORE ALL EROSION CONTROL DEVICES TO WORKING ORDER TO THE SATISFACTION OF THE CITY ENGINEER AFTER EACH RUN-OFF PRODUCING RAINFALL.
9. THE CONTRACTOR SHALL INSTALL ADDITIONAL EROSION CONTROL MEASURES AS MAY BE REQUIRED BY THE CITY ENGINEER DUE TO UNCOMPLETED GRADING OPERATIONS OR UNFORESEEN CIRCUMSTANCES WHICH MAY ARISE.
10. THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATERS CREATE A HAZARDOUS CONDITION.
11. ALL EROSION CONTROL MEASURES PROVIDED PER THE APPROVED GRADING PLAN SHALL BE INCORPORATED HEREON.
12. GRADED AREAS AROUND THE PROJECT PERIMETER MUST DRAIN AWAY FROM THE FACE OF THE SLOPE AT THE CONCLUSION OF EACH WORKING DAY.
13. ALL REMOVABLE PROTECTIVE DEVICES SHOWN SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN THE FIVE-DAY RAIN PROBABILITY FORECAST EXCEEDS 40 %.
14. INSTALL GRAVEL BAG CHEVRONS AS FOLLOWS:
* SLOPES OF 1 % - 3 % - ONE ROW OF BAGS AT 100-FOOT INTERVALS.
* SLOPES OF 3 % - 8 % - ONE ROW OF BAGS AT 50-FOOT INTERVALS.
* SLOPES OF 8 % OR GREATER - TWO ROWS OF BAGS AT 50-FOOT INTERVALS.
15. STRAW BALES TO BE PLACED ALONG THE PERIMETER OF THE PROJECT AT THE TOE OF SLOPE ON CACTUS ROAD AND THE DOWNSTREAM BOUNDARY OF THE PROJECT IN SPRING CANYON DURING THE CONSTRUCTION.
16. TEMPORARY BERM SHALL BE CONSTRUCTED AT TOP OF SLOPE TO KEEP DRAINAGE AWAY FROM SLOPE.

SPECIAL NOTES:

1. THESE PLANS INDICATE SEDIMENT AND EROSION CONTROLS FOR THE FINAL GRADING CONDITIONS. THE CONTRACTOR IS RESPONSIBLE TO IMPLEMENT AND MAINTAIN INTERIM EROSION CONTROL MEASURES THROUGHOUT THE CONSTRUCTION PERIOD.
2. INTERIM CONTROL MEASURES INCLUDE HYDROSEEDING, PLACEMENT OF GRAVEL BAGS, STRAW ROLLS (WATTLES), SILT FENCES, AND INLET GRAVEL BAG BERMS CONSISTENT WITH THE SWPPP IDENTIFIED BMPS AND AS REQUIRED BY THE NPDES PERMIT.
3. FOR TEMPORARY HYDROSEEDING OF SLOPES DURING RAINY SEASON, SEE SHEET 4 OF THE PLANS.
4. EROSION CONTROL MEASURES SHOULD BE IN PLACE AT THE END OF EACH DAY DURING THE RAINY SEASON (NOVEMBER 1 TO APRIL 30). ADDITIONAL MEASURES SHOULD BE IN PLACE THROUGHOUT THE DURATION OF CONSTRUCTION AS NECESSARY TO PREVENT SEDIMENT FROM LEAVING THE SITE.
5. THE CONTRACTOR SHALL PROVIDE AN ON-CALL (24-HOUR/DAY) CONTACT PERSON RESPONSIBLE FOR THE IMPLEMENTATION OF ADDITIONAL EMERGENCY MEASURES NECESSARY TO COMPLY WITH THE NPDES PERMIT REQUIREMENTS.
6. TEMPORARY AND FINAL SLOPES SHALL BE TRACK-WALKED TO CREATE DEPRESSIONS 2 TO 3 INCHES DEEP. THE FINAL SLOPES SHALL BE HYDROSEEDED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.
7. AT THE END OF CONSTRUCTION AND START OF THE MAINTENANCE PERIOD, THE CONTRACTOR SHALL HAVE THE EROSION CONTROL FEATURES SHOWN ON THESE DRAWINGS IN PLACE. THE CONTRACTOR SHALL MAINTAIN THE CONSTRUCTED IMPROVEMENTS, FINAL COVER, AND VEGETATION FOR THE DURATION OF THE MAINTENANCE PERIOD.

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REGISTERED PROFESSIONAL ENGINEER SHAHRIAR SHAHIN No. C061340 Exp. 3-2006 CIVIL STATE OF CALIFORNIA

PRIVATE CONTRACT

EROSION AND SEDIMENT CONTROL PLAN:

SESI PROPERTY CLOSURE PROJECT

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 13 OF 14 SHEETS

W.O. NO. 420058

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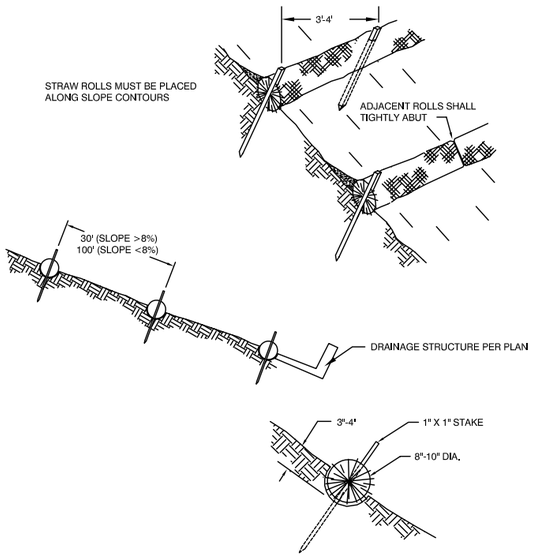
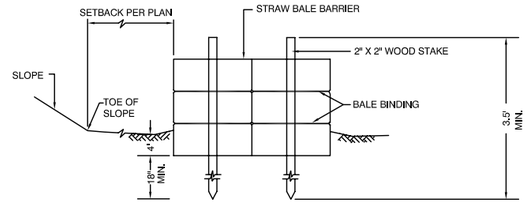


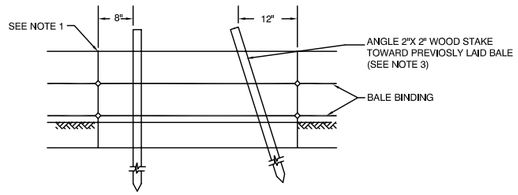
STRAW ROLL NOTES:

1. INSTALL PER MANUFACTURES RECOMMENDATIONS.
2. TYPICAL STRAW ROLL INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE ROLL IN A TRENCH, 3"-4" DEEP, DUG ON CONTOUR. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND ROLL.

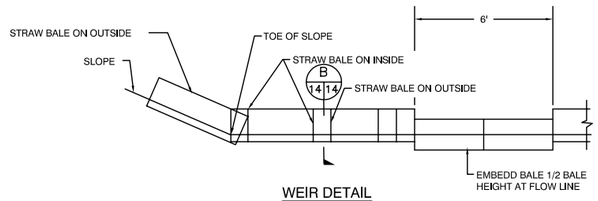
STRAW ROLL DETAILS — 1 / 14 | 13
NOT TO SCALE



SECTION B / 14 | 14



PROFILE

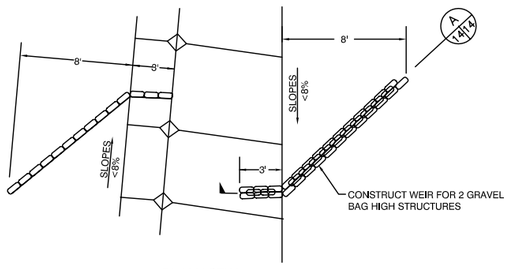


WEIR DETAIL

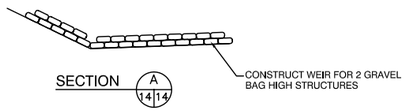
NOTES:

1. PLACE STRAW BALES TIGHTLY TOGETHER
2. TAMP EMBEDMENT SPOILS AGAINST SIDES OF INSTALLED BALES.
3. DRIVE ANGLED WOOD STAKE BEFORE VERTICAL STAKE TO ENSURE TIGHT ABUTMENT TO ADJACENT BAKE.
4. SANDBAG ROWS AND LAYERS SHALL BE OFFSET TO ELIMINATE GAPS.

STRAW BALE DETAIL — 3 / 14 | 13
NOT TO SCALE

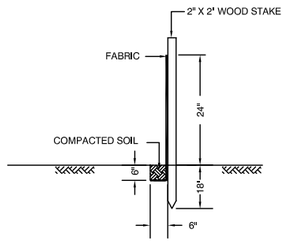


PLAN VIEW



SECTION A / 14 | 14

GRAVEL BAG CHEVRON DETAIL — 2 / 14 | 13
NOT TO SCALE



SILT FENCE DETAIL — 4 / 14 | 13
NOT TO SCALE

ENV AMERICA
ENVIRONMENTAL ENGINEERING, CONSULTING & CONSTRUCTION
16 TECHNOLOGY DRIVE
SUITE 154
IRVINE, CALIFORNIA 92618
PHONE 949-453-9191
FAX 949-453-9292

REGISTERED PROFESSIONAL ENGINEER — SAMVIAR SWATI — No. C42580 Exp. 3/2004 — CIVIL — STATE OF CALIFORNIA

PERMIT DESIGN, NOT FOR CONSTRUCTION

PRIVATE CONTRACT

SEDIMENT AND EROSION CONTROL DETAILS:

SESI PROPERTY CLOSURE PROJECT

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 14 OF 14 SHEETS

W.O. NO. 420058

FOR CITY ENGINEER _____ DATE _____

DESCRIPTION	BY	APPROVED	DATE	FILMED
ISSUED FOR RAW	ENV AMERICA	MLR	FEB 2005	

1784 – 6331 NAD 83 COORD.

144–1771 LAMBERT COORDINATES

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

31928–14–D

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